INDIA
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RAFALE

The Rafale is a 4.5 generation, twin-engine omnirole, air supremacy, interdiction, aerial reconnaissance, ground support, in-depth strike, anti-ship and nuclear deterrence fighter aircraft, equipped with a wide range of weapons. The Rafale aircraft was formally inducted into Indian Air Force on 10th September 2020 at a formal function at Air Force Station, Ambala. Source: IAF

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1 The Land and People

"INDIA is the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend and the great grandmother of tradition. Our most valuable and most instructive materials in the history of man are treasured up in India only."— ***Mark Twain***

India has a unique culture and is one of the oldest and greatest civilisations of the world. It stretches from the snow-capped Himalayas in the north to the sun-drenched coastal villages of the south and the humid tropical forests on the south-west coast, from the fertile Brahmaputra valley on its east to the Thar Desert in the west. It covers an area of 32,87,263 sq. km. [1] It has achieved all-round socio-economic progress during the last so many years of its independence. India is the seventh largest country in the world and ranks second in population. The country stands apart from the rest of Asia, marked off as it is by mountains and the sea, which give her a distinct geographical entity. Bounded by the Great Himalayas in the north, it stretches southwards and at the Tropic of Cancer tapers off into the Indian Ocean between the Bay of Bengal on the east and the Arabian Sea on the west.

Lying entirely in the northern hemisphere, the mainland extends between latitudes 8°4' and 37°6' north, longitudes 68°7' and 97°25' east, and measures about 3,214 km from north to south between the extreme latitudes and about 2,933 km from east to west between the extreme longitudes. It has a land frontier of about 15,200 km. The total length of the coastline of the mainland, Lakshadweep Islands and Andaman and Nicobar Islands is 7,516.6 km.

Geographical Background

Countries having a common border with India are: Afghanistan and Pakistan to the north-west; China, Bhutan and Nepal to the north; Myanmar to the far east; and Bangladesh to the east. Sri Lanka is separated from India by a narrow channel of sea formed by the Palk

Strait and the Gulf of Mannar. The country can be divided into six zones mainly north, south, east, west, central and north-east. It has 28 states and eight union territories. [2]

Physical Features

The mainland comprises four regions, namely, the great mountain zone, plains of the Ganga and the Indus, the desert region and the southern peninsula.

The Himalayas comprise three almost parallel ranges interspersed with large plateaus and valleys, some of which, like the Kashmir and Kullu valleys, are fertile, extensive and of great scenic beauty. Some of the highest peaks in the world are found in these ranges. The high altitudes allow travel only through a few passes, notably the Jelep La and Nathu La on the main Indo-Tibet trade route through the Chumbi valley, north-east of Darjeeling and Shipki La in the Satluj valley, north-east of Kalpa (Kinnaur). The mountain wall extends over a distance of about 2,400 km with a varying depth of 240 to 320 km. In the east, between India and Myanmar and India and Bangladesh, hill ranges are much lower. Garo, Khasi, Jaintia and Naga Hills, running almost east to west, join the chain to Mizo and Rakhine Hills running north to south. India_2021_AMAZON: E published on AMAZON

The plains of the Ganga and the Indus, about 2,400 km long and 240 to 320 km broad, are formed by basins of three distinct river systems—the Indus, the Ganga and the Brahmaputra. They are one of the world's greatest stretches of flat alluvium and also one of the most densely populated areas on the earth. Between the Yamuna at Delhi and the Bay of Bengal, nearly 1,600 km away, there is a drop of only 200 metres in elevation.

The desert region can be divided into two parts—the 'great desert' and the 'little desert'. The 'great desert' extends from the edge of the Rann of Kutch beyond the Luni river northward. The whole of the Rajasthan-Sind frontier runs through this. The 'little desert' extends from the Luni between Jaisalmer and Jodhpur up to the northern west. Between the great and the little deserts lies a zone of absolutely sterile country, consisting of rocky land, cut up by limestone ridges.

The Peninsular Plateau is marked off from the plains of the Ganga and the Indus by a mass of mountain and hill ranges varying from 460 to 1,220 metres in height. Prominent among these are the Aravali, Vindhya, Satpura, Maikala and Ajanta. The Peninsula is flanked on the one side by the Eastern Ghats where average elevation is about 610 metres and on the other by the Western Ghats where it is generally from 915 to 1,220 metres, rising in places to over 2,440 metres. Between the Western Ghats and the Arabian Sea lies a narrow coastal strip, while between Eastern Ghats and the Bay of Bengal, there is a broader coastal area. The southern point of the plateau is formed by the Nilgiri Hills where the Eastern and the Western Ghats meet. The Cardamom Hills lying beyond may be regarded as a continuation of the Western Ghats.

Geological Structure

The Indian sub-continent can be divided in three regions: (i) Extra peninsular regions (the Himalayas); (ii) Indo-Gangetic plains; and (iii) Peninsular regions. The present configuration of India is attributed to the collision of Indian plate with the Eurasian plate around 4-5 crore years ago. This collision and later subduction of the Indian plate has resulted in the formation of most picturesque mountain chain in the world. Prior to the collision, the area remained under marine conditions for a long duration and was covered by an ocean known as Tethys. In the south of Himalaya, there is a foreland basin known as Indo-Gangetic plains. These plains are youngest in age, highly fertile in nature and mainly consist of alluvium deposited by the rivers draining from the Himalayas and the peninsular regions. India_2021_DPD: E published on DPD mobile app

The peninsular region is shaped like an inverted triangle and considered a storehouse of economic minerals for India. This region is relatively stable and consists of rock unit of earliest periods dating back as far as 3.8 Ga (~380 crore years). The rest is being covered by the Gondwana Supergroup, lava flows belonging to the Deccan Trap volcanism and younger Quaternary sediments.

River Systems

The river systems of India can be classified into four groups, namely, (i) Himalayan rivers; (ii) Deccan rivers; (iii) Coastal rivers; and (iv)

Rivers of the inland drainage basin. The Himalayan rivers are formed by melting snow and glaciers and therefore, continuously flow throughout the year. During the monsoon months, the Himalayas receive very heavy rainfall due to which rivers swell and cause frequent floods. The Deccan rivers on the other hand are rainfed and therefore fluctuate in volume. Many of these are non-perennial. The Coastal streams, especially on the west coast are short in length and have limited catchment areas. Most of them are non-perennial. The streams of inland drainage basin of western Rajasthan are few and far apart. Most of them are of an ephemeral character.

The main Himalayan river systems are those of the Indus and the Ganga-Brahmaputra-Meghna system. The Indus, which is a great river of the world, rises near Mansarovar in Tibet and flows through India and thereafter through Pakistan and finally falls into the Arabian Sea near Karachi. Its important tributaries flowing in Indian territory are the Sutlej (originating in Tibet), the Beas, the Ravi, the Chenab and the Jhelum. The Ganga-Brahmaputra-Meghna is another important system of which the principal sub-basins are those of Bhagirathi and the Alaknanda, which join at Dev Prayag to form the Ganga. It traverses through Uttarakhand, Uttar Pradesh, Bihar and West Bengal. Below Rajmahal Hills, the Bhagirathi, which used to be the main course in the past, takes off, while the Padma continues eastward and enters Bangladesh. The Yamuna, the Ramganga, the Ghaghra, the Gandak, the Kosi, the Mahananda and the Sone are the important tributaries of the Ganga. Rivers Chambal and Betwa are the important sub-tributaries, which join the Yamuna before it meets the Ganga. The Padma and the Brahmaputra join at Bangladesh and continue to flow as the Padma or Ganga. The Brahmaputra rises in Tibet, where it is known as Tsangpo and runs a long distance till it crosses over into India in Arunachal Pradesh under the name of Dihang. Near Passighat, the Debang and Lohit join the river Brahmaputra and the combined river runs all along the Assam valley. It crosses into Bangladesh downstream of Dhubri.

The principal tributaries of Brahmaputra in India are the Subansiri, Jia Bhareli, Dhansiri, Puthimari, Pagladiya and the Manas. The Brahmaputra in Bangladesh fed by Teesta, etc. finally falls into the Ganga. The Barak river, the head stream of Meghna, rises in the hills in Manipur. The important tributaries of the river are Makku, Trang, Tuivai, Jiri, Sonai,

Rukni, Katakhal, Dhaleswari, Langachini, Maduva and Jatinga. Barak continues in Bangladesh till the combined Ganga-Brahmaputra join it near Bhairab Bazar.

In the Deccan region, most of the major river systems flowing generally in the east fall into Bay of Bengal. The major east flowing rivers are Godavari, Krishna, Cauvery and Mahanadi. Narmada and Tapti are major west flowing rivers.

The Godavari in the Southern Peninsula has the second largest river basin covering 10 per cent of the area of India. Next to it is the Krishna basin in the region and the Mahanadi is another large basin of the region. The basin of the Narmada in the uplands of the Deccan, flowing into the Arabian Sea and of the Cauvery in the south, falling into the Bay of Bengal are about the same size, though with different character and shape.

While only handful of such rivers drain into the sea near the delta of east coast, there are as many as 600 such rivers on the west coast, which are comparatively small.

A few rivers in Rajasthan do not drain into the sea. They drain into salt lakes and get lost in sand with no outlet to sea. Besides these, there are the desert rivers which flow for some distance and are lost in the desert. These are Luni, Machhu, Rupen, Saraswati, Banas, Ghaggar and others.

The entire country has been divided into 20 river basins/group of river basins, comprising 12 major basins and eight composite river basins. The 12 major river basins are: (i) Indus; (ii) Ganga-Brahmaputra-Meghna; (iii) Godavari; (iv) Krishna; (v) Cauvery; (vi) Mahanadi; (vii) Pennar; (viii) Brahmani-Baitarani; (ix) Sabarmati; (x) Mahi; (xi) Narmada; and (xii) Tapti. Each of these basins has a drainage area exceeding 20,000 sq. km.

The eight composite river basins combining suitably together all the other remaining medium (drainage area of 2,000 to 20,000 sq. km) and small river systems (drainage area less than 2000 sq. km) for the purpose of planning and management are: (i) Subarnarekha—combining Subarnarekha and other small rivers between Subarnarekha and Baitarani; (ii) east flowing rivers between Mahanadi and Pennar; (iii) east flowing rivers between Pennar and Kanyakumari; (iv) area of Inland

drainage in Rajasthan desert; (v) west flowing rivers of Kutch and Saurashtra including Luni; (vi) west flowing rivers from Tapi to Tadri; (vii) west flowing rivers from Tadri to Kanyakumari; and (viii) minor rivers draining into Myanmar (Burma) and Bangladesh.

Climate/Seasons

The climate of India may be broadly described as tropical monsoon type. The Indian Meteorological Department (IMD) designates four official seasons: (i) winter, from December to early April. The year's coldest months are December and January, when temperatures average around 10-15 °C (50-59°F) in the northwest; temperatures rise as one proceeds towards the equator, peaking around 20-25 °C (68-77 °F) in mainland India's south-east; (ii) summer or pre-monsoon season, lasting from April to June (April to July in north-western India). In western and southern regions, the hottest month is April; for northern regions, May is the hottest month. Temperatures average around 32-40 °C (90-104 °F) in most of the interior; (iii) monsoon or rainy season, lasting from June to September. The season is dominated by the humid south-west summer monsoon, which slowly sweeps across the country beginning in late May or early June. Monsoon rains begin to recede from north India at the beginning of October. South India typically receives more rainfall; and (iv) post-monsoon season, lasting from October to December. In north-western India, October and November are usually cloudless.

The Himalayan states, being more temperate, experience two additional seasons: autumn and spring. Traditionally, Indians note six seasons, each about two months long: spring, summer, monsoon, early autumn, late autumn and winter. These are based on the astronomical division of the 12 months into six parts. The ancient Hindu calendar also reflects these seasons in its arrangement of months.

India's climate is affected by two seasonal winds—the north-east monsoon and the south-west monsoon. The north-east monsoon commonly known as winter monsoon blows from land to sea whereas south-west monsoon known as summer monsoon blows from sea to land after crossing the Indian Ocean, the Arabian Sea and the Bay of Bengal. The south-west monsoon brings most of the rainfall during the year in the country.

Flora

India is rich in flora. Available data places India at the tenth position in the world and fourth in Asia in plant diversity. From about 70 per cent geographical area surveyed so far, over 46,000 species of plants have been described by the Botanical Survey of India (BSI), Kolkata. The vascular flora, which forms the conspicuous vegetation cover, comprises 15,000 species.

With a wide range of climatic conditions from the torrid to the arctic, India has a rich and varied vegetation, which only a few countries of comparable size possess. India can be divided into eight distinct floristic regions: the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, the Malabar and the Andamans.

The western Himalayan region extends from Kashmir to Kumaon. Its temperate zone is rich in forests of chir, pine, other conifers and broad-leaved temperate trees. Higher up, forests of deodar, blue pine, spruce and silver fir occur. The alpine zone extends from the upper limit of the temperate zone of about 4,750 metres or even higher. The characteristic trees of this zone are high-level silver fir, silver birch and junipers. The eastern Himalayan region extends from Sikkim eastwards and embraces Darjeeling, Kurseong and the adjacent tracts. The temperate zone has forests of oaks, laurels, maples, rhododendrons, alder and birch. Many conifers, junipers and dwarf willows also grow here. The Assam region comprises the Brahmaputra and the Surma valleys with evergreen forests, occasional thick clumps of bamboos and tall grasses. The Indus plain region comprises the plains of Punjab, western Rajasthan and northern Gujarat. It is dry, hot and supports natural vegetation. The Ganga plain region covers the area which is alluvial plain and is under cultivation for wheat, sugarcane and rice. Only small areas support forests of widely differing types. The Deccan region comprises the entire table land of the Indian Peninsula and supports vegetation of various kinds, from shrub jungles to mixed deciduous forests. The Malabar region covers the excessively humid belt of mountain country parallel to the west-coast of the peninsula. Besides being rich in forest vegetation, this region produces important commercial crops, such as coconut, betelnut, pepper, coffee, tea, rubber and cashewnut. The Andaman region abounds in evergreen, mangrove, beach and diluvial forests. The Himalayan region

extending from Kashmir to Arunachal Pradesh through Sikkim, Meghalaya and Nagaland and the Deccan Peninsula is rich in endemic flora, with a large number of plants which are not found elsewhere.

The flora of the country is being studied by BSI and its nine circle/field offices located all over the country along with certain universities and research institutions.

Ethno-botanical study deals with the utilisation of plants and plant products by ethnic races. A scientific study of such plants has been done by BSI. A number of detailed ethno-botanical explorations have been conducted in different tribal areas of the country, through which more than 800 plant species of ethno-botanical interest have been collected and identified at different centres.

Owing to destruction of forests for agricultural, industrial and urban development, several Indian plants species are facing the threat of extinction. About 1,336 plant species are considered vulnerable and endangered. Around 20 species of higher plants are categorised as possibly extinct, as these have not been sighted during the last six to ten decades. BSI brings out an inventory of endangered plants in the form of a publication titled, *Red Data Book*.

Faunal Resources

India is one of the mega-biodiversity countries in the world with unique biogeographical locations, diversified climatic conditions and wide array of ecosystems, ranging from the deep sea to high mountain ranges in Himalayas. Zoological Survey of India (ZSI), which is under the Ministry of Environment, Forest and Climate Change, is more than a century old committed to inventorying the faunal resources of the country right from Protozoa to Mammalia. ZSI Headquarters at Kolkata and its 16 regional centres spread across the country are studying the Indian fauna of all the states, UTs and protected areas in different ecosystems. Altogether, 1,02,161 species have been documented by the ZSI from India, of which diversity of Arthropods stands tall with 76,461 species. India contributes to 6.52 per cent of the global faunal diversity with an endemism of about 28 per cent. Among the animals reported from the country, over 2,800 species are protected under different schedules of Wildlife (Protection) Act, 1972 for better conservation.

According to world biogeographic classification, India represents two of the major realms, the Palearctic and Indo-Malayan, and three biomes: Tropical Humid Forests, Tropical Dry/Deciduous Forests and Warm Deserts/ Semi-Deserts. The Indian landmass has been classified into ten Bio-geographic Zones and ZSI documented the faunal resources in some of them: the Himalayas with 30,377 species; Trans-Himalayas with 3,324 species; Islands with 11,009 species; the North-East with 18,527; Desert with 3,324; Semi-Desert with 7,424; and Coasts with 11,883 species.

In order to protect the biodiversity, 903 protected areas that are sprawling over 5.02 per cent of the country's geographical areas have been designated, of which faunal communities have been thoroughly listed from 120 protected areas by the ZSI. In the Indian Ocean region, India is one of the countries with high marine biodiversity that has been accounted with 20,444 species. Besides these, 9,457 species from freshwater, 3,939 species from estuarine and 5,747 species from mangrove ecosystems have been recorded from the country. Among the Indian fauna, 5,632 species have been included in various categories of the IUCN Red list that require some attention for conservation.

For effective conservation of the water bodies, 37 wetlands have been recognised as Ramsar Sites - the wetlands of international importance - in which 6,602 species of animals under different groups have been reported. Under the Man and Biosphere concept of UNESCO, 18 Biosphere Reserves have been designated in India, of which Sunderban Biosphere reserve harbours large number of species to the tune of 2,626 while in Great Nicobar - 2,079 species, Nilgiri - 1,875 species, Gulf of Mannar - 1,086 species, Manas - 846 species, Pachmarhi - 795 species, Achanakmar-Amarkantak -649 species, Simlipal - 539 species, Nanda Devi - 427 species and Nokrek - 262 species of animals have been reported. Out of 35 biodiversity hotspots identified in the world, Himalayas, Indo-Burma, Sundaland and Western Ghats — Sri Lanka are shared by India with high degree of endemism.

It is presumed that the Indian faunal diversity may exceed many folds as several least studied, unknown invertebrates and microbes are yet to be explored. However, ZSI publishes the new discoveries of animals from India to an extent of 350 to 400 species and new records at the rate of 150 to 200 species per annum.

Demographic Background

Census

The Census of India 2001, was historic and epoch making, being the first census of the twenty-first century and the third millennium. It reveals benchmark data on the state of abundant human resources available in the country, their demography, culture and economic structure at a juncture, which marks a centennial and millenial transition.

Census 2011 was the 15th census of its kind since 1872. It was held in two phases: House listing and Housing Census (April to September, 2010) and Population Enumeration (February 9 to 28, 2011 with Revisional round during Marchlto 5, 2011). Reference Date was 0.00 hour of March 1, 2011. In snow bound areas, the Population Enumeration was conducted from September 11 to 30, 2010. The final population data was released on April 30, 2013.

Population

As per the Census of India 2011, the population of India stood at 1,210.9 million (623.2 million males and 587.6 million females) as on March 1, 2011. Out of which 833.7 million (68.9 per cent) lived in rural areas and the rest 377.1 million (31.1 per cent) lived in urban areas. With a population of 1028.7 million in 2001, the decadal growth rate of population in India between 2001 and 2011 was 17.7 per cent.

The population of India is estimated to have reached 1363.0 million in 2021 and is projected to reach 1,522.3 million by 2036. [3] India accounts for only 135.79 million sq. km of the surface area, a meagre 2.4 per cent of the world surface area. Yet, it accounts for a whopping percentage of the world population.

Population Density

One of the important indices of population concentration is the density of population. It is defined as the number of persons per square kilometre (sq. km). The population density of India in 2011 was 382 per sq. km with a decadal growth rate of 17.7 per cent. The density of population has increased in all states and union territories between 1991 and 2011. Among the bigger states, Bihar was the most thickly populated state with a population density of 1,106 persons per sq. km followed by

West Bengal at 1,028 and Kerala at 860 in 2011. Among smaller states/union territories, the population density of NCT of Delhi was the highest at 11,320 persons per sq. km in 2011 followed by Chandigarh at 9,258 persons per sq. km.

Sex Ratio

Sex ratio, defined as the number of females per thousand males, is an important social indicator to measure the extent of prevailing equality between males and females in a society at a given point of time. The sex ratio in India has always remained unfavourable to females. It was 972 at the beginning of the twentieth century (1901) and thereafter showed a continuous decline until 1941 when it reached 945. The sex ratio has improved from 933 in 2001 to 943 in 2011. However, the child sex ratio (defined as the number of girls aged 0-6 years per thousand boys aged 0-6 years) has deteriorated from 927 in 2001 to 919 in 2011.

Literacy

A person aged seven and above who can both read and write with understanding in any language is treated as literate as per the Census of India 2011. A person, who can only read but cannot write, is not literate. Prior to 1991, Census of India treated children below five years of age as illiterates.

As per Census 2011, the literacy rate in India stood at 73.0 per cent (80.9 per cent for males and 64.6 per cent for females), an increase from 64.8 per cent in 2001. Kerala retained its top position with 94.0 per cent (male 96.1 per cent, female 92.1 per cent) followed by Lakshadweep (91.8 per cent). Bihar with a literacy rate of 61.8 per cent (male 71.2 per cent and female 51.5 per cent) was the lowest in the country.

Migration

Migration is one of the most important indicators of demography. People migrate from one place to another due to various socio-economic reasons. Census of India records migration by two methods, namely: place of last residence and place of birth. In terms of place of last residence method, migrants are defined as people who are currently residing at a place different from their place of last residence. In terms of place of birth method, people who are currently residing at a place different from their place of birth are treated as migrants.

About 455.8 million people were treated as migrants by place of last residence, 141.9 million were considered to be migrants between the period 2001 and 2011. And a major chunk of the migrants in India (84.8 per cent) in the period 2001-2011 were within the state of enumeration. Only 15.6 per cent of migrants were considered inter-state migrants. Similarly, within the states/union territories, 64.9 per cent of the migration in the period 20012011 happened within the district of enumeration and the rest 35.1 per cent migrants were inter-district migrants.

Fertility and Mortality Rates

The fertility rate (or Total Fertility Rate TFR) of a population is the average number of children that would be born to a woman over her lifetime if she were subjected to the prevailing rate of age-specific fertility in the population. A TFR of about 2.1 chilldren per woman is called Replacement-level fertility. From a TFR of 2.6 in 2008 to 2.2 in 2018, India has gradually moved towards achieving the replacement level of fertility.

Crude Birth Rate

Thr Crude Birth Rate (CBR) is a measure of birth rates and is defined as the total number of live births in a year divided by the total mid-year population and multiplied by 1,000 to express it per 1,000 population. CBR in India has reached 20.0 per 1,000 population in 2018.

Crude Death Rate

The Crude Death Rate (CDR) is a measure of mortality rates and is defined as the total number of deaths in a year divided by the total mid-year population and multiplied by 1,000 to express it per 1,000 population. The Crude Death Rate for India in 2018 was 6.2 per 1,000 population, gradually down from 7.4 in 2008.

Infant Mortality Rate

The Infant Mortality Rate (IMR) is another important indicator of demography and is defined as the number of deaths in a year per 1,000 live births of children under one year of age. India has been able to drastically reduce the Infant Mortality Rate from 53 in 2008 to 32 in 2018.

Note:

All the demographic measures described above are produced by the Office of the Registrar General and Census Commissioner of India through the decadal population Census and half-yearly sample surveys under Sample Registration System. For more details and to access the reports, please visit the census website at www.censusindia.gov.in .

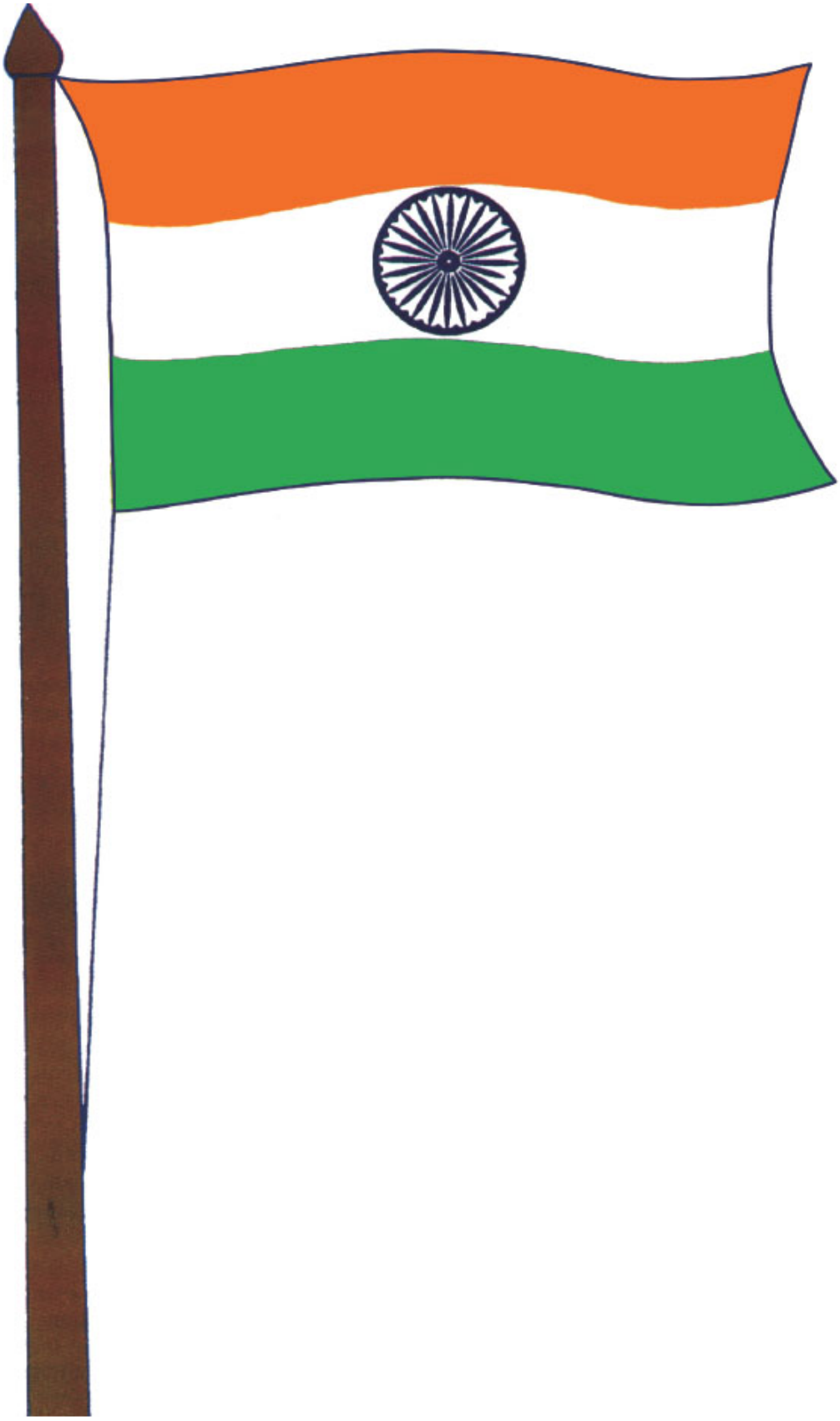
2 National Symbols

National Flag

THE National Flag shall be a tricolour panel made up of three rectangular panels or sub-panels of equal width. The colour of the top panel shall be India saffron *kesari* and that of the bottom panel India green. The middle panel shall be white, bearing at its centre the design of Ashoka Chakra in navy blue colour with 24 equally spaced spokes. The Ashoka Chakra shall preferably be screen printed or otherwise printed or stenciled or suitably embroidered and shall be completely visible on both sides of the Flag in the centre of the white panel. The National Flag shall be rectangular in shape. The ratio of the length to the height (width) of the Flag shall be 3:2. The design of the National Flag was adopted by the Constitutent Assembly of India on July 22,1947.

Apart from non-statutory instructions issued by the government from time to time, display of the National Flag is governed by the provisions of the Emblems and Names (Prevention of Improper Use) Act, 1950 and the Prevention of Insults to National Honour Act, 1971. The Flag Code of India, 2002 is an attempt to bring together all such laws, conventions, practices and instructions for the guidance of all concerned.

The Flag Code of India, 2002 effective from January 26, 2002 superseded the 'Flag Code-India' as it existed then. As per the provisions of the Flag Code of India, 2002, there is no restriction on the display of the National Flag by members of general public, private organisations, educational institutions, etc., except to the extent provided in the Emblems and Names (Prevention of Improper Use) Act, 1950 and the Prevention of Insults to National Honour Act, 1971 and any other law enacted on the subject.



State Emblem

The State Emblem of India is an adaptation of the Lion Capital of Asoka at Sarnath. In the original, the Lion Capital has four lions mounted back to back, on a circular abacus. The frieze of the abacus is adorned with sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening Dharma Chakras. The abacus rests on a bell-shaped lotus.

The profile of the Lion Capital showing three lions mounted on the abacus with a Dharma Chakra in the centre, a bull on the right and a galloping horse on the left, and outlines of Dharma Chakras on the extreme right and left was adopted as the State Emblem of India on January 26, 1950. The bell-shaped lotus was omitted. The motto *"Satyameva j* ayate"-'Truth alone Triumphs' written in Devanagari script below the profile of the Lion Capital is part of the State Emblem of India.

In the State Emblem lies the official seal of the Government of India. Its use is regulated by the State Emblem of India (Prohibition of Improper Use) Act, 2005 and The State Emblem of India (Regulation of Use) Rules, 2007 [read with State Emblem of India (Regulation of Use) Amendment Rules, 2010].

National Emblem

National Anthem

The song *Jana-gana-mana,* composed originally in Bangla by Rabindranath Tagore, was adopted in its Hindi version by the Constituent Assembly as the National Anthem of India on January 24,1950. It was first sung on December 27, 1911 at the Calcutta Session of the Indian National Congress. The complete song consists of five stanzas. The first stanza contains the full version of the National Anthem:

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata
Panjaba-Sindhu-Gujarata-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
uchchala-jaladhi-taranga
Tava subha name jage, tave
subha asisa mage,
Gahe tava jaya-gatha.
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
jaya he, jaya he, jaya he,
jaya jaya jaya, jaya he!

The playing time of the full version of the National Anthem is approximately 52 seconds. A short version consisting of the first and last lines of the National Anthem (playing time approximately 20 seconds) is also played on certain occasions. The following is Tagore's English rendering of the anthem:

Thou art the ruler of the minds of all people,
Dispenser of India's destiny.
Thy name rouses the hearts of Punjab,
Sind,
Gujarat and Maratha,
Of the Dravida and Orissa and Bengal;
It echoes in the hills of the Vindhyas and
Himalayas,
mingles in the music of jamuna and
Ganges and is
chanted by the waves of the Indian Sea.
They pray for thy blessings and sing thy praise.
The saving of all people waits in thy hand,

Thou dispenser of India's destiny.
Victory, victory, victory to thee.

National Song

The song *Vande Mataram,* composed in Sanskrit by Bankimchandra Chatterji, was a source of inspiration to the people in their struggle for freedom. It has an equal status with *Jana-gana-mana.* The first political occasion when it was sung was the 1896 session of the Indian National Congress. The following is the text of its first stanza :

Vande Mataram!
Sujalam, suphalam, malayaja
shitalam,
Shasyashyamalam, Mataram!
Shubhrajyotsna
pulakitayaminim,
Phullakusumita drumadala
shobhinim,
Suhasinim sumadhura
bhashinim,
Sukhadam varadam, Mataram!
Vande Mataram,
Vande Mataram!

The English translation of the stanza rendered by Sri Aurobindo in prose [1] is:

I bow to thee, Mother,
richly-watered, richly-fruited,
cool with the winds of the south,
dark with the crops of the
harvests,
The Mother!
Her nights rejoicing in the glory of the moonlight,
her lands clothed beautifully with her trees in flowering bloom,

sweet of laughter, sweet of speech,
the Mother, giver of boons, giver of bliss.

National Calendar

The National Calendar based on the *Saka Era,* with *Chaitra* as its first month and a normal year of 365 days was adopted from March 22,1957 along with the Gregorian calendar for the following official purposes: (i) Gazette of India; (ii) news broadcast by All India Radio; (iii) calendars issued by the Government of India; and (iv) government communications addressed to the public.

Dates of the National Calendar have a permanent correspondence with dates of the Gregorian Calendar, 1 *Chaitra* falling on March 22 normally and on March 21 in leap year.

Website: www.mha.gov.in

POLITICAL MAP OF INDIA
Scale 1:10,000,000 or 1 Centimetre to 100 Kilometres
REFERENCES
Capital of India, Headquarters of state / union territory
DELHI
PATNA
PEOPLE'S REPUBLIC OF CHINA
TIBET AUTONOMOUS REGION
AFGHĀNISTĀN
PĀKISTĀN
NEPAL
BHUTAN
BANGLADESH
MYANMAR
SRI LANKA
LADAKH
PUNJAB
HARYANA
UTTARĀKHAND
UTTAR PRADESH
RĀJASTHĀN
BIHAR
SIKKIM
ASSAM
MEGHĀLAYA
WEST BENGAL
JHARKHAND
CHHATTISGARH
ODISHA
GUJARAT
MADHYA PRADESH
MAHĀRĀSHTRA
TELANGĀNA
ANDHRA PRADESH
KARNĀTAKA
GOA
TAMIL NADU
KERALA
LAKSHADWEEP
ANDAMAN AND NICOBAR ISLANDS
DELHI
JAIPUR
LUCKNOW
PATNA
BHOPAL
RAIPUR
BHUBANESHWAR
HYDERABAD
BENGALURU
CHENNAI
THIRUVANANTHAPURAM
PUDUCHERRY
MUMBAI
KOLKATA
DISPUR
ITANAGAR
GANGTOK
IMPHAL
SHILLONG
AIZAWL
KOHIMA
AGARTALA
NAYPYIDAW
DHAKA
THIMPHU
KATHMANDU
COLOMBO
JAFFNA
PORT BLAIR
Diu
Daman
Andaman Sea
Bay of Bengal
Arabian Sea
Indian Ocean

3 Polity

INDIA, a union of states, is a Sovereign Socialist Secular Democratic Republic with a parliamentary system of government. The Republic is governed in terms of the Constitution, which was adopted by Constituent Assembly on November 26, 1949 and came into force on January 26, 1950.

The Constitution which envisages parliamentary form of government is federal in structure with unitary features. The President of India is the constitutional head of executive of the union. Article 74(1) of the Constitution provides that there shall be a Council of Ministers with the Prime Minister as its head to aid and advise the President who shall in exercise of his functions, act in accordance with such advice. The real executive power thus vests in the Council of Ministers with the Prime Minister as its head. The Council of Ministers is collectively responsible to the House of the People (Lok Sabha). Similarly, in states, the Governor is the head of executive, but it is the Council of Ministers with the Chief Minister as its head in whom real executive power vests. The Council of Ministers of a state is collectively responsible to the Legislative Assembly of the state.

The Constitution distributes legislative power between Parliament and State Legislatures and provides for vesting of residual powers in Parliament. The power to amend the Constitution also vests in Parliament. The Constitution has provision for independence of Judiciary, Comptroller and Auditor-General, Public Service Commissions and Chief Election Commission.

Union and its Territory

India comprises 28 states and eight union territories. The states are: Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana,

Tripura, Uttarakhand, Uttar Pradesh and West Bengal. Union territories are: Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Jammu and Kashmir, National Capital Territory of Delhi, Ladakh, Lakshadweep and Puducherry.

The Jammu and Kashmir Reorganisation Act, 2019 was enacted (MHA, SO No. 3979 (E) dated November 2, 2019) to provide for reorganisation of the erstwhile state of Jammu and Kashmir into the two union territories—one to be eponymously called Jammu and Kashmir, and the other Ladakh. October 31, 2019 was notified as the appointed day for all purposes of the Act. A bill for the Act was introduced in the Rajya Sabha, on August 5, 2019 and was passed on that day. It was passed by the Lok Sabha on August 6, 2019. It received the President's assent on August 9, 2019. The introduction of the bill was preceded by a presidential order under Article 370 of the Indian constitution that revoked Jammu and Kashmir's special status, and mandating, inter alia, that all the provisions of the Indian Constitution would be applicable to Jammu and Kashmir.

Accordingly, the "State Legislature including Legislative Council of the State" has been abolished and shall from now onwards be construed as "Legislative Assembly of the Union Territory of Jammu and Kashmir". All the provisions of the constitution as amended from time to time have become applicable to the existing Jammu and Kashmir with effect from August 5, 2019, and any notification issued or order, rule or appointment made during the period between the August 5,2019 and October 31 are "required to be protected, as if such actions have been taken in accordance with law". There are references in the state laws that have been applied to the expressions 'permanent residents' or 'hereditary state subjects' are now omitted.

Citizenship

The Constitution of India provides for a single citizenship for the whole of India. Every person who was at the commencement of the Constitution (January 26, 1950), domiciled in the territory of India and: (a) who was born in India; or (b) either of whose parents were born in India; or (c) who has been ordinarily resident in India for not less than five years became a citizen of India. The Citizenship Act, 1955, deals

with matters relating to acquisition, determination and termination of Indian citizenship after the commencement of the Constitution.

Citizenship (Amendment) Bill

The Citizenship Act was amended by the Citizenship (Amendment) Bill, 2019 which was passed by the Parliament on December 11, 2019 and received the President's assent on December 12, 2019. The amended Act makes foreign illegal migrants of six religious communities, i.e., Hindu, Sikh, Buddhist, Jain, Parsi and Christian from Afghanistan, Bangladesh and Pakistan eligible for Indian citizenship. It is applicable to those who have taken shelter in India due to persecution on grounds of religion or fear of such persecution in their countries and have entered into India on or before December 31, 2014. On acquiring citizenship, such migrants shall be deemed to be Indian citizens from the date of their entry into India and all legal proceedings regarding their status as illegal migrants or their citizenship will be closed. The Third Schedule to the Act has been amended to make applicants belonging to the said communities from the three countries eligible for citizenship by naturalisation, if they can establish their residency in India for five years instead of the previous requirement of eleven years.

The provisions of the Act, however, do not apply to tribal areas of Assam, Meghalaya, Mizoram and Tripura as included in the Sixth Schedule to the Constitution and the areas where 'The Inner Line Permit' is applicable including the states of Arunachal Pradesh, Nagaland, Mizoram and Manipur. [https://pib.gov.in/newsite/PrintRelease.aspx?relid=195666; https://pib.gov.in/newsite/PrintRelease.aspx?relid=195783; http://egazette.nic.inAA/riteReadData/2019/ 214646.pdf].

Fundamental Rights

The Constitution offers all citizens, individually and collectively, some basic freedoms. These are guaranteed in the Constitution in the form of six broad categories of Fundamental Rights which are justiciable. Articles 12 to 35 contained in Part III of the Constitution deal with Fundamental Rights. These are: (i) Right to equality including equality before law, prohibition of discrimination on grounds of religion, race, caste, sex or place of birth and equality of opportunity in matters of employment; (ii) Right to freedom of speech and expression, assembly,

association or union, movement, residence, and right to practice any profession or occupation (some of these rights are subject to security of the state, friendly relations with foreign countries, public order, decency or morality); (iii) Right against exploitation, prohibiting all forms of forced labour, child labour and traffic in human beings; (iv) Right to freedom of conscience and free profession, practice and propagation of religion; (v) Right of any section of citizens to conserve their culture, language or script and right of minorities to establish and administer educational institutions of their choice; and (vi) Right to constitutional remedies for enforcement of Fundamental Rights.

Fundamental Duties

Bythe42nd Amendment of the Constitution, adopted in 1976, Fundamental Duties of the citizens have also been enumerated. Article 51 A contained in Part IV A of the Constitution deals with Fundamental Duties. These enjoin upon a citizen among other things, to abide by the Constitution, to cherish and follow noble ideals, which inspired India's struggle for freedom, to defend the country and render national service when called upon to do so and to promote harmony and spirit of common brotherhood transcending religious, linguistic and regional or sectional diversities.

Directive Principles of State Policy

The Constitution lays down certain Directive Principles of State Policy, which though not justiciable, are 'fundamental in governance of the country' and it is the duty of the state to apply these principles in making laws. These have been contained in Part IV from Articles 36 to 51 of the Constitution. These lay down that the state shall strive to promote the welfare of people by securing and protecting as effectively as it may a social order in which justice - social, economic and political - shall form the basis in all institutions of national life. The state shall direct its policy in such a manner so as to secure the right of all men and women to an adequate means of livelihood, equal pay for equal work and within limits of its economic capacity and development, to make effective provision for securing the right to work, education and to public assistance in the event of unemployment, old age, sickness and

disablement or other cases of undeserved want. The State shall also endeavour to secure to workers a living wage, humane conditions of work, a decent standard of life and full involvement of workers in management of industries.

In the economic sphere, the state is to direct its policy in such a manner as to secure distribution of ownership and control of material resources of community to subserve the common good and to ensure that operation of economic system does not result in concentration of wealth and means of production to common detriment.

Some of the other important directives relate to provision of opportunities and facilities for children to develop in a healthy manner, free and compulsory education for all children up to the age of 14; promotion of education and economic interests of scheduled castes, scheduled tribes and other weaker sections; organisation of village panchayats; separation of judiciary from executive; promulgation of a uniform civil code for whole country; protection of national monuments; promotion of justice on the basis of equal opportunity; provision of free legal aid; protection and improvement of environment and safeguarding of forests and wildlife of the country; and promotion of international peace and security, just and honourable relations between nations, respect for international law, treaty obligations and settlement of international disputes by arbitration.

The Union Executive

The Union executive consists of the President, the Vice-President and the Council of Ministers with the Prime Minister as the head to aid and advise the President.

President

The President is elected by members of an electoral college consisting of elected members of both Houses of Parliament and Legislative Assemblies of the states in accordance with the system of proportional representation by means of single transferable vote. To secure uniformity among states *inter se* as well as parity between the states, as a whole, and the Union, suitable weightage is given to each vote. The President must be a citizen of India, not less than 35 years of age and qualified for

election as a member of the Lok Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 61 of the Constitution. He may, by writing under his hand addressed to the Vice-President, resign his office.

The executive power of the Union is vested in the President and is exercised by him either directly or through officers subordinate to him in accordance with the Constitution. The supreme command of defence forces of the Union also vests in him. The President summons, prorogues, addresses, sends messages to Parliament and dissolves the Lok Sabha; promulgates Ordinances at any time, except when both Houses of Parliament are in session; makes recommendations for introducing financial and money bills and gives assent to bills; grants pardons, reprieves, respites or remission of punishment or suspends, remits or commutes sentences in certain cases. When there is a failure of the constitutional machinery in a state, he can assume to himself all or any of the functions of the government of that state. The President can proclaim Emergency in the country if he is satisfied that a grave emergency exists whereby security of India or any part of its territory is threatened whether by war or external aggression or armed rebellion.

Vice-President

The Vice-President is elected by members of an electoral college consisting of members of both Houses of Parliament in accordance with the system of proportional representation by means of single transferable vote. He must be a citizen of India, not less than 35 years of age and eligible for election as a member of the Rajya Sabha. His term of office is five years and he is eligible for re-election. His removal from office is to be in accordance with procedure prescribed in Article 67(b).

The Vice-President is *ex-officio* Chairman of the Rajya Sabha and acts as President when the latter is unable to discharge his functions due to absence, illness or any other cause or till the election of a new President (to be held within six months when a vacancy is caused by death, resignation or removal or otherwise of President). While so acting, he ceases to perform the function of the Chairman of the Rajya Sabha.

Council of Ministers

There is a Council of Ministers, headed by the Prime Minister, to aid and advise the President in exercise of his functions. The Prime Minister is appointed by the President who also appoints other ministers on the advice of Prime Minister. The Council is collectively responsible to the Lok Sabha. It is the duty of the Prime Minister to communicate to the President all decisions of Council of Ministers relating to administration of affairs of the Union and proposals for legislation and information relating to them.

The Council of Ministers comprises ministers who are members of Cabinet, Ministers of State (independent charge), Ministers of State and Deputy Ministers.

Legislature

Legislature of the Union which is called Parliament, consists of the President and two Houses, known as Council of States (Rajya Sabha), and House of the People (Lok Sabha). Each House has to meet within six months of its previous sitting. A joint sitting of two Houses can be held in certain cases.

Rajya Sabha

The Constitution provides that the Rajya Sabha shall consist of 12 members to be nominated by the President from amongst persons having special knowledge or practical experience in respect of such matters as literature, science, art and social service; and not more than 238 representatives of the states and of the union territories. Details of Rajya Sabha members are given in Appendices.

Lok Sabha and its Speaker(s)

Lok Sabha	Date of First Meeting	Date of Dissolution	Speaker Name[1]	From	To
First Lok Sabha	13 May 1952	4 April 1957[2]	Ganesh Vasudev Mavalankar	15 May 1952	27 February 1956[3]
			M. Ananthasayanam Ayyangar	8 March 1956	10 May 1957
Second Lok Sabha	10 May 1957	31 March 1962[4]	M. Ananthasayanam Ayyangar	11 May 1957	16 April 1962
Third Lok Sabha	16 April 1962	3 March 1967[5]	Sardar Hukam Singh	17 April 1962	16 March 1967
Fourth Lok Sabha	16 March 1967	27 December 1970[6]	Neelam Sanjiva Reddy	17 March 1967	19 July 1969[7]
			Gurdial Singh Dhillon	8 August 1969	19 March 1971
Fifth Lok Sabha	19 March 1971	18 January 1977[8]	Gurdial Singh Dhillon	22 March 1971	1 December 1975[9]
			Bali Ram Bhagat	5 January 1976	25 March 1977
Sixth Lok Sabha	25 March 1977	22 August 1979[10]	Neelam Sanjiva Reddy	26 March 1977	13 July 1977[11]
			K.S. Hegde	21 July 1977	21 January 1980
Seventh Lok Sabha	21 January 1980	31 December 1984[12]	Balram Jakhar	22 January 1980	15 January 1985
Eighth Lok Sabha	15 January 1985	27 November 1989[13]	Balram Jakhar	16 January 1985	18 December 1989
Ninth Lok Sabha	18 December 1989	13 March 1991[14]	Rabi Ray	19 December 1989	9 July 1991
Tenth Lok Sabha	9 July 1991	10 May 1996	Shivraj V. Patil	10 July 1991	22 May 1996
Eleventh Lok Sabha	22 May 1996	4 December 1997[15]	P. A. Sangma	23 May 1996	23 March 1998 (FN)
Twelfth Lok Sabha	23 March 1998	26 April 1999[16]	G.M.C. Balayogi	24 March 1998	20 October 1999 (FN)
Thirteenth Lok Sabha	20 October 1999	6 February 2004[18]	G.M.C. Balayogi	22 October 1999	3 March 2002[17]
			Manohar Gajanan Joshi	10 May 2002	2 June 2004
Fourteenth Lok Sabha	2 June 2004	18 May 2009	Somnath Chatterjee	4 June 2004	1 June 2009
Fifteenth Lok Sabha	1 June 2009	18 May 2014	Meira Kumar	1 June 2009	18 May 2014
Sixteenth Lok Sabha	4 June 2014	24 May 2019	Sumitra Mahajan	6 June 2014	17 June 2019
Seventeenth Lok Sabha	17 June 2019	-	Om Birla	19 June 2019	Till date

1. Under Article 94 of the Constitution, in case of dissolution of the Lok Sabha, the Speaker does not vacate his office until immediately before the first meeting of the House after dissolution.
2. Dissolved thirty eight days before expiry of its term.
3. Died.
4. Dissolved forty days before expiry of its term.
5. Dissolved forty four days before expiry of its term.
6. Dissolved one year and seventy nine days before expiry of its term.
7. Resigned.
8. Term of the Lok Sabha which was to expire on 18 March 1976 was extended by one year up to 18 March 1977 by the House of the People (Extension of Duration) Act, 1976. It was extended for a further period of one year up to 18 March 1978 by the House of the People (Extension of Duration) Amendment Act, 1976. However, the House was dissolved after having been in existence for a period of five years, ten months and six days.
9. Resigned.
10. House was dissolved after having been in existence for a period of two years, four months and twenty eight days.
11. Resigned.
12. Dissolved twenty days before expiry of its term.
13. Dissolved forty eight days before expiry of its term.
14. Dissolved after having been in existence for a period of one year, two months and twenty five days.
15. House was dissolved after having been in existence for a period of one year, six months and thirteen days.
16. House was dissolved after having been in existence for a period of one year, one month and four days.
17. Died.
18. Dissolved two hundred fifty three days before expiry of its term.

Elections to the Rajya Sabha are indirect; members representing states are elected by the elected members of Legislative Assemblies of the states in accordance with the system of proportional representation by

means of the single transferable vote, and those representing union territories are chosen in such a manner as Parliament may by law prescribe. The Rajya Sabha is not subject to dissolution; one-third of its members retire every second year.

Website : www.rajyasabha.in

Lok Sabha

The Lok Sabha is composed of representatives of people chosen by direct election on the basis of adult suffrage. The maximum strength of the House envisaged by the Constitution is now 552 (530 members to represent the states, 20 members to represent the union territories and not more than two members of the Anglo-Indian community to be nominated by the President, if, in his opinion, that community is not adequately represented in the House). The total elective membership of the Lok Sabha is distributed among the states in such a way that the ratio between the number of seats allotted to each state and the population of the state is, as far as practicable, the same for all states. The Lok Sabha at present consists of 543 members. Of these, 530 members are directly elected from the states and 13 from union territories. Following the 84th amendment to the Constitution in 2001, the total number of existing seats as allocated to various states in the Lok Sabha on the basis of the 1971 census shall remain unaltered till the first census to be taken after the year 2026.

The term of the Lok Sabha, unless dissolved earlier is five years from the date appointed for its first meeting. However, while a Proclamation of Emergency is in operation, this period may be extended by Parliament by law for a period not exceeding one year at a time and not extending in any case, beyond a period of six months after the Proclamation is or has ceased to operate. Sixteen Lok Sabhas have been constituted so far. The term of each Lok Sabha and its Speaker(s) is given in table in the preceding page. The names of members of the 17th Lok Sabha, their constituencies and party affiliations are given in Appendices.

Website: www.loksabha.in

Qualification for Membership of Parliament

In order to be chosen a Member of Parliament, a person must be a citizen of India and not less than 30 years of age in the case of Rajya

Sabha and not less than 25 years of age in the case of Lok Sabha. Additional qualifications may be prescribed by Parliament by law.

Functions and Powers of Parliament

The Parliament in India has the cardinal functions of legislation, overseeing of administration, passing of the budget, ventilation of public grievances and discussing various subjects like development plans, national policies and international relations. The distribution of powers between the Union and the states, given in the Constitution, emphasizes in many ways the general predominance of Parliament in the legislative field. The Parliament can, under certain circumstances, assume legislative power with respect to a subject falling within the sphere exclusively reserved for the states. It can impeach the President and remove the judges of Supreme Court and High Courts, the Chief Election Commissioner and the Comptroller and Auditor General in accordance with the procedure laid down in the Constitution.

All legislation requires consent of both the Houses of Parliament. In the case of money bills, however, the 'will' of the Lok Sabha prevails. Delegated legislation is also subject to review and control by Parliament. Besides the power to legislate, the Constitution vests in Parliament the power to initiate amendment of the Constitution.

Parliamentary Committees

The functions of Parliament are varied in nature. The time at its disposal is limited. It cannot make very detailed scrutiny of all legislative and other matters that come up before it. A good deal of Parliamentary business is, therefore, transacted in the committees. Both Houses of Parliament have a similar committee structure, with few exceptions. Their appointment, terms of office, functions and procedure of conducting business are also more or less similar and are regulated as per rules made by the two Houses under Article 118(1) of the Constitution.

Broadly, Parliamentary Committees are of two kinds—*Standing Committees* and *Ad Hoc Committees.* The former are elected or appointed every year or periodically and their work goes on, more or less, on a continuous basis. The latter are appointed on an *ad hoc* basis as need arises and they cease to exist as soon as they complete the task assigned to them.

Standing Committees: Among the Standing Committees, the three Financial Committees - *Committees on Estimates, Public Accounts* and *Public Undertakings* - constitute a distinct group as they keep an unremitting vigil over government expenditure and performance. While members of the Rajya Sabha are associated with Committees on Public Accounts and Public Undertakings, the members of the Committee on Estimates are drawn from the Lok Sabha.

The *Estimates Committee* reports on what economies, improvements in organisation, efficiency or administrative reform consistent with policy underlying the estimates may be effected. It also examines whether the money is well laid out within limits of the policy implied in the estimates and suggests the form in which estimates shall be presented to the Parliament. The *Public Accounts Committee* scrutinises appropriation and finance accounts of the government and reports of the Comptroller and Auditor General. It ensures that public money is spent in accordance with the Parliament's decision and calls attention to cases of waste, extravagance, loss or nugatory expenditure. The *Committee on Public Undertakings* examines reports of the Comptroller and Auditor General, if any. It also examines whether public undertakings are being run efficiently and managed in accordance with sound business principles and prudent commercial practices.

Besides these three financial committees, the Rules Committee of the Lok Sabha recommended setting-up of 17 *Department Related Standing Committees* (DRSCs). Accordingly, 17 Department Related Standing Committees were set up on April 8,1993. In July, 2004, rules were amended to provide for the constitution of seven more such committees, thus raising the number of DRSCs from 17 to 24. The functions of these committees are: (a) to consider the demands for grants of various ministries/departments of Government of India and make reports to the Houses; (b) to examine such bills as are referred to the committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, and make reports thereon; (c) to consider annual reports of ministries/departments and make reports thereon; and (d) to consider policy documents presented to the Houses, if referred to the committee by the Chairman, Rajya Sabha or the Speaker, Lok Sabha, and make reports thereon.

Other *Standing Committees* in each House, divided in terms of their functions, are (i) Committees to Inquire: (a) *Committee on Petitions* examines petitions on bills and on matters of general public interest and also entertains representations on matters concerning subjects in the Union List; and (b) *Committee of Privileges* examines any question of privilege referred to it by the House or Speaker/Chairman; (ii) Committees to Scrutinize : (a) *Committee on Government Assurances* keeps track of all the assurances, promises, undertakings, etc., given by Ministers in the House and pursues them till they are implemented; (b) *Committee on Subordinate Legislation* scrutinises and reports to the House whether the power to make regulations, rules, sub-rules, bye-laws, etc., conferred by the Constitution or Statutes is being properly exercised by the delegated authorities; and (c) *Committee on Papers Laid on the Table* examines all papers laid on the table of the House by ministers, other than statutory notifications and orders which come within the purview of the Committee on Subordinate Legislation, to see whether there has been compliance with the provisions of the Constitution, Act, rule or regulation under which the paper has been laid; (iii) Committees relating to the day-to-day business of the House: (a) *Business Advisory Committee* recommends allocation of time for items of government and other business to be brought before the Houses; (b) *Committee on Private Members' Bills and Resolutions of the Lok Sabha* classifies and allocates time to bills introduced by private members, recommends allocation of time for discussion on private members' resolutions and examines Constitution amendment bills before their introduction by private members in the Lok Sabha. The Rajya Sabha does not have such committee. It is the Business Advisory Committee of that House which recommends allocation of time for discussion on stage or stages of private members' bills and resolutions; (c) *Rules Committee* considers matters of procedure and conduct of business in the House and recommends amendments or additions to the rules; and (d) *Committee on Absence of Members from the Sittings of the House of the Lok Sabha* considers all applications from members for leave or absence from sittings of the House. There is no such committee in the Rajya Sabha. Applications from members for leave or absence are considered by the House itself; (iv) *Committee on the Welfare of Scheduled Castes and Scheduled Tribes,* on which members from both Houses serve, considers

all matters relating to the welfare of scheduled castes and scheduled tribes which come within the purview of the Union Government and keeps a watch whether constitutional safeguards in respect of these classes are properly implemented; (v) Committees concerned with the provision of facilities to members: (a) *General Purposes Committee* considers and advises Speaker/Chairman on matters concerning affairs of the House, which do not appropriately fall within the purview of any other Parliamentary Committee; and (b) *House Committee* deals with residential accommodation and other amenities for members; (vi) *Joint Committee on Salaries and Allowances of Members of Parliament,* constituted under the Salary, Allowances and Pension of Members of Parliament Act, 1954, apart from framing rules for regulating payment of salary, allowances and pension to Members of Parliament, also frames rules in respect of amenities like medical, housing, telephone, postal, constituency and secretarial facility; (vii) *Joint Committee on Offices of Profit* examines the composition and character of committees and other bodies appointed by the Central and state governments and union territories administrations and recommends what offices ought to or ought not to disqualify a person from being chosen as a member of either House of Parliament; (viii) The *Library Committee* consisting of members from both Houses, considers matters concerning the Library of Parliament; (ix) On April 29, 1997, a *Committee on Empowerment of Women* with members from both the Houses was constituted, to secure status, dignity and equality for women in all fields; (x) On March 4, 1997, the *Ethics Committee* of the Rajya Sabha was constituted. The Ethics Committee of the Lok Sabha was constituted on May 16, 2000.

Ad hoc Committees: Such committees may be broadly classified under two heads: (a) committees which are constituted from time to time, either by the two Houses on a motion adopted in that behalf or by Speaker/Chairman to inquire into and report on specific subjects, (e.g., *Committees on food management in Parliament House Complex, Committee on installation of portraits/statues of National leaders and Parliamentarians in Parliament House Complex, Committee on Security in Parliament Complex, Committee on MPLADS, Committee on Railway convention,* etc.); and (b) Select or Joint Committees on Bills which are appointed to consider and report on a particular bill. These committees are distinguishable from the other *ad hoc* committees as much as they are

concerned with bills and the procedure to be followed by them as laid down in the Rules of Procedure and Directions by the Speaker/ Chairman.

Leaders of Opposition in Parliament

The Leaders of Opposition in the Rajya Sabha and the Lok Sabha are accorded statutory recognition. Salary and other suitable facilities are extended to them through a separate legislation brought into force on November 1, 1977.

Government Business in Parliament

The Minister of Parliamentary Affairs is entrusted with coordinating, planning and arranging government business in both Houses of Parliament. In discharge of this function, he is assisted by two Ministers of State. The Minister also keeps close and constant contact with the presiding officers, the leaders as well as chief whips of various parties and groups in both Houses of Parliament.

Consultative Committees

Functioning of Consultative Committees of Members of Parliament for various ministries is one of the functions allocated to the Ministry of Parliamentary Affairs under the Government of India (Allocation of Business) Rules, 1961. The minimum membership of a Consultative Committee is ten and the maximum membership is thirty. The Consultative Committee stands dissolved upon dissolution of every Lok Sabha and are re-constituted upon constitution of each Lok Sabha.

Youth Parliament Competition

In order to develop democratic ethos in the younger generation, the Ministry conducts Youth Parliament Competitions in various categories of schools and colleges/universities. The 'Youth Parliament Scheme' was first introduced in the schools in Delhi in 1966-67. Kendriya Vidyalayas located in and around Delhi were incorporated into the ongoing scheme in 1978. Subsequently, a separate scheme of Youth Parliament for Kendriya Vidyalayas at the national level was launched in 1988. In 1997-98, two new Youth Parliament Schemes at the national level, one for Jawahar Navodaya Vidyalayas and the other for universities/colleges were launched.

All India Whips' Conference

The Ministry of Parliamentary Affairs, organises All India Whips' Conference from time to time with the purpose of establishing suitable links among the whips of various political parties at the centre and the states/union territories who are concerned with the practical working of the legislatures to discuss matters of common interest and to evolve high standards to strengthen the institution of parliamentary democracy. Seventeen All India Whips' Conferences have been organised so far since 1952.

Special Mentions

The Ministry of Parliamentary Affairs takes follow-up action on matters raised under Rule 377 of the Rules of Procedure and Conduct of Business in Lok Sabha and by way of Special Mentions in Rajya Sabha. After 'Question Hour' in the Lok Sabha, members raise matters of urgent public importance at 12.00 noon. In the Rajya Sabha, members raise matters of urgent public importance at 11.00 am. Though it is not mandatory, ministers often react to the points made by the members. In the absence of concerned minister, the Minister of Parliamentary Affairs assures the House or the member that their sentiments would be conveyed to the concerned ministers.

Members are required to give notice for raising a matter under this Rule to the Secretary- General in the prescribed form enclosing the text of the Special Mention not exceeding 250 words. Unless the Chairman otherwise directs, a member can raise only one 'matter' during a week and total number of Special Mentions to be admitted for a day should not ordinarily exceed seven. Any member who proposes to associate himself with a particular Special Mention may do so with the permission of the Chairman.

Implementation of Assurances

The Ministry culls out from the printed daily proceedings, assurances, promises, undertakings, etc., given by ministers in both the Houses of Parliament, and forward them to the concerned ministries/departments for implementation. Thereafter, periodic review of the stage of implementation is done by the Ministry and the ministries are also reminded to expedite the fulfillment of assurances. On receipt of the Implementation Reports (IRs) from the ministries, after due scrutiny, statements showing action taken by the government in implementation of

the assurances are periodically laid on the Table of the respective House by Minister/ Minister of State for Parliamentary Affairs. After the implementation reports are laid, the members as well as the ministries concerned are informed about the laying of the reports.

Goodwill Delegation

The parliamentarians of a country play a significant role in determining the policy of the country and strengthening of relations with other countries. More particularly, it is indeed useful and necessary for a democratic and developing country like India to select some Members of Parliament and distinguished personalities. With these objectives, Ministry of Parliamentary Affairs sponsors Government Goodwill Delegation of Members of Parliament to other countries and receives similar delegations of parliamentarians under the exchange programme from other countries through the Ministry of External Affairs.

Welfare of Members of Parliament

The Ministry of Parliamentary Affairs looks after the welfare of ailing Members of Parliament admitted for treatment in hospitals in Delhi and renders any assistance required by them. In the unfortunate event of passing away of a Member of Parliament in Delhi, the Ministry of Parliamentary Affairs renders all necessary assistance to the bereaved family members in taking the mortal remains of the deceased member for last rites to a place chosen by the family.

Comptroller and Auditor General

The Comptroller and Auditor General (CAG) of India is appointed by the President. The procedure and the grounds for his removal from office are the same as for a Supreme Court judge. He is not eligible for further office under the union or a state government after he ceases to hold his office.

The accounts of the Union and of the states shall be kept in such form as the President may, on the advice of the CAG, prescribe. The reports of the India relating to the accounts of the union shall be submitted to the President, who shall cause them to be laid before each House of Parliament. The reports of the CAG of India relating to the accounts of a

state shall be submitted to the Governor of the state, who shall cause them to be laid before the legislature of the state.

The duties, powers and conditions of service of the CAG have been specified by the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

Website: www.cag.gov.in

Attorney-General

The Attorney-General for India is appointed by the President of India. Any person qualified to be a judge of the Supreme Court can be appointed for the post. The duties of the Attorney-General is to give advice to the Government of India upon such legal matters, and to perform such other duties of a legal character, as may from time to time be referred or assigned to him by the President, and to discharge the functions conferred on him by or under the Constitution or any other law for the time being in force. In the performance of his duties, the Attorney-General shall have the right of audience in all courts in the territory of India. The Attorney-General shall hold office during the pleasure of the President and shall receive such remuneration as the President may determine.

Solicitor General of India

The Solicitor General of India is the government's chief legal advisor, and its primary lawyer in the Supreme Court of India. The Solicitor General of India is the secondary law officer of the country, assists the Attorney-General, and is himself assisted by several Additional Solicitors General of India. Like the Attorney-General for India, the Solicitor General and the Additional Solicitors General advise the government and appear on behalf of the Union of India in terms of the Law Officers (Terms and Conditions) Rules, 1972.

However, unlike the post of Attorney-General for India, which is a Constitutional post under Article 76, the posts of the Solicitor General and the Additional Solicitors General are merely statutory. Appointments Committee of the Cabinet appoints the Solicitor General.

Administrative Set-up

The Government of India (Allocation of Business) Rules, 1961 are made by the President of India under Clause (3) of Article 77 of the Constitution for the allocation of business of the Government of India. The ministries/departments of the government are created by the President on the advice of the Prime Minister under these rules. The business of the government is transacted in the ministries/ departments, secretariats and offices as per the distribution of subjects specified in these rules. Each of the ministry(ies) is assigned to a minister by the President on the advice of the Prime Minister. Each department is generally under the charge of a secretary to assist the minister on policy matters and general administration.

Cabinet Secretariat

The Cabinet Secretariat functions directly under the Prime Minister. The administrative head of the Secretariat is the Cabinet Secretary who is also the ex-officio Chairman of the Civil Services Board. The business allocated to Cabinet Secretariat is (i) secretarial assistance to the Cabinet and Cabinet Committees; and (ii) rules of business.

The Cabinet Secretariat is responsible for the administration of the Government of India (Transaction of Business) Rules, 1961 and the Government of India (Allocation of Business) Rules, 1961, facilitating smooth transaction of business in ministries/departments of the government by ensuring adherence to these rules. It assists in decision-making by ensuring inter-ministerial coordination, ironing out differences amongst ministries/departments and evolving consensus through the instrumentality of the standing and *ad hoc* Committees of Secretaries. The Cabinet Secretariat ensures that the President, the Vice-President and ministers are kept informed of the major activities of all ministries/departments by means of monthly summary of their activities. Management of major crisis situations in the country and coordinating activities of various ministries in such a situation is also one of the functions of the Cabinet Secretariat. The Secretaries keep the Cabinet Secretary informed of developments from time to time. The Transaction of Business Rules also require them to keep the Cabinet Secretary informed specially if there are any departures from these rules.

Website: www.cabsec.gov.in

Ministries/Departments of the Government

The government consists of a number of ministries/departments, their number and character varying from time to time based on factors such as volume of work, priorities attached to certain subjects, etc.

List of the Ministries/ Departments [1]

1. **Ministry of Agriculture and Farmers Welfare *(Krishi evam Kisan Kalyan Mantralaya)***
   (i) Department of Agriculture, Co-operation and Farmers Welfare ***(Krishi, Sahkarita evam Kisan Kalyan Vibhag)***
   (ii) Department of Agricultural Research and Education *(Krishi Anusandhan aur Shiksha Vibhag)*
2. **Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) *(Ayurveda, Yoga aur Prakratik Chikitsa, Unani, Siddha aur Homoeopathy)* (Ayush Mantralaya)**
3. **Ministry of Chemicals and Fertilizers *(Rasayan aur Urvarak Mantralaya)***
   (i) Department of Chemicals and Petro-Chemicals *(Rasayan aur Petro-Rasayan Vibhag)*
   (ii) Department of Fertilizers *(Urvarak Vibhag)*
   (iii) Department of Pharmaceuticals *(Aushadh Vibhag)*
4. **Ministry of Civil Aviation *(Nagar Vimanan Mantralaya)***
5. **Ministry of Coal *(Koyala Mantralaya)***
6. **Ministry of Commerce and Industry *(Vanijya aur Udyog Mantralaya)***
   (i) Department of Commerce *(Vanijya Vibhag)*
   (ii) Department for Promotion of Industry and Internal Trade *(Udyog Samvardhan aur Antarik Vyapar Vibhag)*
7. **Ministry of Communications *(Sanchar Mantralaya)***
   (i) Department of Telecommunications *(Doorsanchar Vibhag)*

(ii) Department of Posts *(Dak Vibhag)*

8. **Ministry of Consumer Affairs, Food and Public Distribution *(Upbhokta Mamie, Khadya aur Sarvajanik Vitaran Mantralaya)***

(i) Department of Consumer Affairs *(Upbhokta Mamie Vibhag)*
(ii) Department of Food and Public Distribution *(Khadya aur Sarvajanik Vitaran Vibhag)*

9. Ministry of Corporate Affairs *(Corporate Karya Mantralaya)*

10. Ministry of Culture *(Sanskriti Mantralaya)* 11. Ministry of Defence *(Raksha Mantralaya)*

(i) Department of Defence *(Raksha Vibhag)*
(ii) Department of Military Affairs *(Sainya Karya Vibhag)*
(iii) Department of Defence Production *(Raksha Utpadan Vibhag)*
(iv) Department of Defence Research and Development *(Raksha Anusandhan tatha Vikas Vibhag)*
(v) Department of Ex-Servicemen Welfare *(Poorva Senani Kalyan Vibhag)*

12. Ministry of Development of North-Eastern Region *(Uttar Poorvi Kshetra Vikas Mantralaya)*

13. Ministry of Earth Sciences *(Prithvi Vigyan Mantralaya)*

14. Ministry of Education *(Shiksha Mantralaya)*

(i) Department of School Education and Literacy *(School Shiksha aur Saksharta Vibhag)*
(ii) Department of Higher Education *(Uchchatar Shiksha Vibhag)*

15. Ministry of Electronics and Information Technology *(Electroniki aur Soochana Praudyogiki Mantralaya)*

16. Ministry of Environment, Forest and Climate Change *(Paryavaran,Van aur lalvayu Parovarian Mantralaya)*

17. Ministry of External Affairs *(Videsh Mantralaya)*

18. Ministry of Finance *(Vitta Mantralaya)*

(i) Department of Economic Affairs *(Arthik Karya Vibhag)*
(ii) Department of Expenditure *(Vyaya Vibhag)*
(iii) Department of Revenue *(Rajaswa Vibhag)*
(iv) Department of Investment and Public Asset Management (DIPAM) *(Nivesh aur Lok Parisampatti Prabandhan Vibhag)*
(v) Department of Financial Services *(Vittiya Sewayen Vibhag)*

19. Ministry of Fisheries, Animal Husbandry and Dairying *(Matsapalan, Pashupalan aur Dairy Mantralaya)*

(i) Department of Animal Husbandary and Dairying *(Pashupalan aur Dairy Vibhag)*

(ii) Department of Fisheries *(Matsyapalan Vibhag)*

20. Ministry of Food Processing Industries *(Khadya Prasanskaran Udyog Mantralaya)*

21. Ministry of Health and Family Welfare *(Swasthya aur Parivar Kalyan Mantralaya)*

(i) Department of Health and Family Welfare *(Swasthya aur Parivar Kalyan Vibhag)*

(ii) Department of Health Research *(Swasthya Anusandhan Vibhag)*

22. Ministry of Heavy Industries and Public Enterprises *(Bhari Udyog aur Lok Udyam Mantralaya)*

(i) Department of Heavy Industries *(Bhari Udyog Vibhag)*

(ii) Department of Public Enterprises *(Lok Udyam Vibhag)*

23. Ministry of Home Affairs *(Grih Mantralaya)*

(i) Department of Internal Security *(Aantarik Suraksha Vibhag)*

(ii) Department of States *(Rajya Vibhag)*

(iii) Department of Official Language *(Raj Bhasha Vibhag)*

(iv) Department of Home *(Grih Vibhag)*

(v) Department of Jammu Kashmir and Ladakh Affairs *(Jammu Kashmir aur Ladakh Vibhag)*

(vi) Department of Border Management *(Seema Prabandhan Vibhag)*

24. Ministry of Housing and Urban Affairs *(Awasan aur Shahari Karya Mantralaya)*

25. Ministry of Information and Broadcasting *(Soochana aur Prasaran Mantralaya)*

26. Ministry of Jal Shakti *(Jal Shakti Mantralaya)*

(i) Department of Water Resources, River Development and Ganga Rejuvenation *(jal Sansadhan, Nadi Vikas aur Ganga Sanrakshan Vibhi*

(ii) Department of Drinking Water and Sanitation *(Peya jal aur Swachchhi Vibhag)*

27. Ministry of Labour and Employment *(Shram aur Rozgar Mantralaya)*

28. Ministry of Law and Justice *(Vidhi aur Nyaya Mantralaya)*

(i) Department of Legal Affairs *(Vidhi Karya Vibhag)*
(ii) Legislative Department *(Vidhayee Vibhag)*
(iii) Department of Justice *(Nyaya Vibhag)*

29. Ministry of Micro, Small and Medium Enterprises *(Sukshm, Laghu aur Madhyam Udyam Mantralaya)*

30. Ministry of Mines *(Khan Mantralaya)*

31. Ministry of Minority Affairs *(Alpasankhyak Karya Mantralaya)*

32. Ministry of New and Renewable Energy *(Naveen aur Navikarniya Oorja Mantralaya)*

33. Ministry of Panchayati Raj *(Panchayati Raj Mantralaya)*

34. Ministry of Parliamentary Affairs *(Sansadiya Karya Mantralaya)*

35. Ministry of Personnel, Public Grievances and Pensions *(Karmik, Lok Shikayat tatha Pension Mantralaya)*

(i) Department of Personnel and Training *(Karmik aur Prashikshan Vibhag)*
(ii) Department of Administrative Reforms and Public Grievances *(Prashasnik Sudhar aur Lok Shikayat Vibhag)*
(iii) Department of Pensions and Pensioners' Welfare *(Pension aur Pension Bhogi Kalyan Vibhag)*

36. Ministry of Petroleum and Natural Gas *(Petroleum aur Prakritik Gas Mantralaya)*

37. Ministry of Planning *(Yojana Mantralaya)*

38. Ministry of Power *(Vidyut Mantralaya)*

39. Ministry of Railways *(Rail Mantralaya)*

40. Ministry of Road Transport and Highways *(Sarak Parivahan aur Raj Marg Mantralaya)*

41. Ministry of Rural Development *(Gramin Vikas Mantralaya)*

(i) Department of Rural Development *(Gramin Vikas Vibhag)*
(ii) Department of Land Resources *(Bhumi Sansadhan Vibhag)*

42. Ministry of Science and Technology *(Vigyan aur Praudyogiki Mantralaya)*

(i) Department of Science and Technology *(Vigyan aur Praudyogiki Vibhag)*

(ii) Department of Scientific and Industrial Research *(Vigyan aur Audyogik Anusandhan Vibhag)*

(iii) Department of Bio-Technology *(Biotechnology Vibhag)*

43. Ministry of Shipping *(Pot Parivahan Mantralaya)*

44. Ministry of Skill Development and Entrepreneurship *(Kaushal Vikas aur Udyamita Mantralaya)*

45. Ministry of Social Justice and Empowerment *(Samajik Nyaya aur Adhikarita Mantralaya)*

(i) Department of Social Justice and Empowerment *(Samajik Nyaya aur Adhikarita Vibhag)*

(ii) Department of Empowerment of Persons with Disabilities *(Divyangjan Sashaktikaran Vibhag)*

46. Ministry of Statistics and Programme Implementation *(Sankhyiki aur Karyakram Kiryanvayan Mantralaya)*

47. Ministry of Steel *(Ispat Mantralaya)*

48. Ministry of Textiles *(Vastra Mantralaya)*

49. Ministry of Tourism *(Paryatan Mantralaya)*

50. Ministry of Tribal Affairs *(Janjatiya Karya Mantralaya)*

51. Ministry of Women and Child Development *(Manila aur Bal Vikas Mantralaya)*

52. Ministry of Youth Affairs and Sports *(Yuva Karyakram aur Khel Mantralaya)*

(i) Department of Youth Affairs *(Yuva Karyakaram Vibhag)*

(ii) Department of Sports *(Khel Vibhag)*

Independent Departments

53. Department of Atomic Energy *(Parmanu Oorja Vibhag)*

54. Department of Space *(Antariksh Vibhag)* Apex/Independent Office

55. Cabinet Secretariat *(Mantrimandal Sachivalaya)*

56. President's Secretariat *(Rashtrapati Sachivalaya)*

57. Prime Minister's Office *(Pradhan Mantri Karyalaya)*

58. NITI Aayog *(National Institution for Transforming India)*

59. National Security Council Secretariat
(Rashtriya Suraksha Parishad Sachivalaya)

National Authority for Chemical Weapons Convention

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons is a multilateral international treaty which outlaws the production, stockpiling, and use of chemical weapons and their precursors. The CWC came into force with effect from 1997. By March 2016, 192 states have ratified or acceded to the treaty. The Organisation for the Prohibition of Chemical Weapons (OPCW); an intergovernmental organisation based in The Hague, Netherlands is the 'treaty organisation' for the CWC. The OPCW bagging the Nobel Peace Prize of 2013 is in recognition of the Convention as a very effective Disarmament Treaty.

The National Authority for Chemical Weapons Convention (NACWC) was set up as an office of the Cabinet Secretariat, Government of India to fulfill, on behalf of the Government of India, the obligations under the Chemical Weapons Convention (CWC) and to act as the national focal point for effective liaison with the Organisation for the Prohibition of Chemical Weapons (OPCW) and other state parties on matters relating to the Convention. In 2000, Chemical Weapons Convention Act was passed by the Parliament which came into force in 2005. India is one of the four non-elected members of the Executive Committee (consisting of 41 members from all over the world) of the OPCW. India has representation in the Advisory Body on Administrative and Finance (ABAF), the Confidentiality Commission, Network Committee on Assistance and Protection, Scientific Advisory Body (SAB) and the newly created Advisory Body on Education and Outreach (ABEO) of the OPCW. India is an active collaborator with OPCW and all other state parties in implementation of the provisions of the Convention.

Public Grievances

The Directorate of Public Grievances (DPG) was set up in the Cabinet Secretariat in 1988 to entertain grievances from the public after they fail to get satisfactory redress from the ministry/department concerned within a reasonable time. It is thus, an office of the last resort for redress of grievances relating to sectors in its purview. Grievance can be lodged with DPG through post, email or by lodging the complaint online on the portal. The cases received offline are entered in the system and, thereafter, all cases are handled using PGRAMS application.

Each grievance is first scrutinised to see if it relates to a sector in DPG's purview. Those concerning the sectors outside the purview of DPG are forwarded to the Department of Administrative Reforms and Public Grievances for appropriate disposal, under intimation to the complainants. The remaining grievances are then assessed to ascertain whether the issue involved is grave and whether the concerned ministry/department has been given an opportunity to redress the grievance. The grievances of grave nature which are either long pending or where the redress is not forthcoming from concerned service organisation/ministry are taken up for detailed examination. These cases are followed up to a logical and reasonable conclusion. Other cases are transferred to the concerned ministry for appropriate action.

When DPG seeks comments, the department or organisation is expected to examine the matter and give a reply within thirty days. After receipt of comments, DPG may, if considered necessary, seek further information to ensure that the grievance is dealt with in a fair and objective manner by the department or organisation and confirmation of satisfactory redress of the grievance is also sought from the complainant before closure.

DPG has been progressively computerising its operations since the early years. The Public Grievance Redress and Monitoring System (PGRAMS), an exclusive automation programme for DPG was adopted in 1999. The PGRAMS is integrated with Centralized Public Grievance Redress and Monitoring System, 'CPGRAMS', the operating system for Public Grievances Portal covering all the ministries/departments of Government of India. With a view to improving further the redress system, a number of measures like launch of Hindi version of PGRAMS to widen its coverage, incorporation of features like e-mail/SMS for

better communication with the complainants, press advertisements to increase awareness about DPG in public, etc. were implemented.

National Disaster Management Authority

Emergence of an organisation is always through an evolutionary process. National Disaster Management Authority (NDMA) has also gone through the same stages. The Government of India, in recognition of the importance of Disaster Management as a national priority, set up a high-powered committee in 1999 and a National Committee after the Gujarat earthquake, for making recommendations on the preparation of disaster management plans and suggesting effective mitigation mechanisms. The Tenth Five-Year Plan document also had, for the first time, a detailed chapter on Disaster Management. The Twelfth Finance Commission was also mandated to review the financial arrangements for disaster management.

In 2005, the government enacted the Disaster Management Act, which envisaged the creation of National Disaster Management Authority, under the Ministry of Home Affairs, headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to separhead and implement a holistic and integrated approach to disaster management in the country.

NDMA, as the apex body, is mandated to lay down the policies, plans and guidelines for disaster management to ensure timely and effective response to disasters. Towards this, it has the responsibilities which include:- lay down policies on disaster management; approve the National Plan; lay down guidelines to be followed by the state authorities in drawing up the State Plan; lay down guidelines to be followed by the different ministries or departments of the Government of India for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects; provide such support to other countries affected by major disasters as may be determined by the central government; take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealting with threatening disaster situation or disasters as it may consider necessary; and lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

Website : www.ndma.gov.in

Administrative Reforms and Public Grievances

The Department of Administrative Reforms and Public Grievances (DARPG) is the nodal agency of the Government of India for administrative reforms as well as redressal of public grievances relating to the states in general and those pertaining to central government agencies in particular. The Department endeavours to document and disseminate successful good governance practices by way of audiovisual media and publications. It also undertakes activities in the field of international exchange and cooperation to promote public service reforms.

It recommends innovation and reform in administration and governance. The reform process involves a multidisciplinary approach by bringing together diverse elements, performing rigorous analysis and pursuing cohesive advocacy to bring about change in systems, processes and structures of government. DARPG thus functions as think tank in the context of reforms. It provides a formal platform exchanging and disseminating reform related ideas and succesful best practices.

Website : www.darpg.gov.in

Prime Minister's Award for Excellence in Public Administration

Government of India instituted 'Prime Minister's Award for Excellence in Public Administration' to acknowledge, recognize and reward the extraordinary and innovative work done by officers of the central and state governments. It rewards the outstanding and exemplary performance of civil servants. Since its beginning in 2007 till 2015, 67 awards were conferred in three categories, individual, group, organisation. The structure of the Scheme was changed in 2015-16 to focus on excellence in implementation of identified priority programme. In 2020, the award was broad-based with focus on holistic assesment of districts on economic parameters, Jan Bhagidari, service delivery, etc.

Civil Services Day

The Government of India celebrates April 21 every year as 'Civil Services Day' for the civil servants to rededicate themselves to the cause of citizens and renew their commitment to public service and excellence in work. The first such function was held in Vigyan Bhavan, New Delhi on April 21, 2006.

National Conference on e-Governance

DARPG along with the Ministry of Electronics and Information Technology, in association with one of the state governments, organises the National Conference on e-Governance every year since 1997. This provides a platform for the senior officers of the government including IT secretaries of state governments, IT managers of the central government and resource persons, experts, intellectuals from the industry and academic institutions, etc., to discuss and exchange views and experiences relating to various e-Governance initiatives. So far 21 National Conferences on e-Governance have been held. In the Conference the National Awards on e-Governance are given in following categories which include: Excellence in Government Process Re-engineering, Outstanding performance in citizen centric service delivery; Innovations in existing projects of government departments other than PSUs; Best District level initiative through ICT in North East state; Hill states + UTs (excluding Delhi) and other states; Use of spatial technology and GIS in e-Governance; Innovative Use of ICT in e-Governance projects/initiatives by Start-ups, registered with government, etc.

Each category is given a gold and a silver award. The gold award winning project and its team is given a cash award up to a maximum of ₹ 2 lakh, subject to a ceiling of ₹ 75,000/- per individual and silver winning project and its team is given a cash award up to a maximum of ₹ 1 lakh subject to a ceiling of ₹ 50,000/ - per individual.

National e-Governance Service Delivery Assessment

National e-Governance Service Delivery Assessment (NeSDA) aims at assessing the states, UTs and central ministries on the depth and efficiency of e-Governance service delivery. This framework is envisaged to be used to assess and benchmark the adoption of such services across the country. The United Nations Department of Economic and Social Affairs (UNDESA) brings out the UN e-Government Survey every two years which provides an analysis of progress in using e-Government. India stood at 118 in 2014 which improved to 107 in 2016 and 96 in 2018, out of 193 member countries.

e-Office Project

e-Office is one of the important Mission Mode Projects for implementing the Digital India Plan. The DARPG is the administrative ministry for ensuring e-Office implementation. e-Office aims to increase the usage of workflow and rule based file routing, quick research and retrieval of files and office order, digital signatures, forms and reporting components.

Redressal of Public Grievances

DARPG is responsible for issuing policy guideliness and coordination and monitoring of issues regarding redress of public grievances for the central government. In accordance with the federal principle of governance, the grievances relating to states are forwarded to concerned state government for appropriate action. A mobile app was launched in 2015 which was for android based mobile through which people could lodge and track their public grievance. This has been further developed to make it more user friendly and has now been integrated with the Unified Mobile Application for New-Age Governance (UMANG).

Further, to monitor public grievances on real time and periodically review progress of systemic reforms, an online dashboard has been developed. Systemic reforms and their monitoring metrics, catering to grievance issues are highlighted on the dashboard. This enables Cabinet Secretariat, DARPG and concerned ministries/departments to monitor implementation of these reforms. From time to time the version of CPGRAM is being updated taking into account the problems faced by the citizens and the system itself. At present the version 6 of CPGRAMS is in operation from 2018, which provides for one-time registration. It also enables the citizen to see all the grievances lodged by him and their status on a single screen.

The Department also coordinates the Citizen Charter and Information and Facilitation Counters (IFCs) initiative of the Government of India. With the objective of improving public service delivery and making governments citizen-centric, an assessment improvement framework called ”Sevottam” has been developed. Support is provided to ministries/departments and also to state governments to introduce the Sevottam framework for better service delivery.

Dashboard for Covid-19 Grievances

During preventive lockdown in the wake of Covid-19 pandemic, DARPG started special drive to redress lock down and Covid-19 related grievances in shortest possible time. To ensure dedicated monitoring of those grievances a separate National Monitoring Dashboard for Covid-19 grievances was created. All central ministries and state governments have nominated a nodal officer for prompt disposal of such grievances. DARPG had also engaged BSNL call centres to get feedback from the citizens for disposal of grievances.

Citizen's Charter

The DARPG in its efforts to provide more responsive and citizen-centric governance provides guidelines for formulation and implementation of the Citizen's Charters. A comprehensive website of Citizen's Charter, www.goicharters.nic.in was launched by the department which apart from guidelines contains the Citizen's Charters existing in ministries/departments, states/ UTs and organisations.

Good Governance Index

DARPG has developed Good Governance Index (GGI) for ten key sectors across 50 indicators. These indicators can be used to assess the status of governance and impact of various interventions taken up by the state governments and the union territories for improving governance. First edition of GGI was released by DARPG on December 25,2020 on the occasion of Good Governance Day.

Integration of Awaaz-e-Awam with CPGRAMS

Public grievance portal of union territory of Jammu and Kashmir has been integrated with Centralized Public Grievance Portal of Government of India for seamless transfer of grievances to the authorities responsible for redressal and effective monitoring for their prompt disposal. Further UT of J&K has taken up setting up grievance portal in each of 20 districts through a new web application JK-IGRAMS.

Documentation and Dissemination

The Documentation and Dissemination Division of the Department primarily carries out the activities of documentation and dissemination of good governance practices of centre, state/union territory governments with a view to share experience with each other and replicate elsewhere.

Financial Assistance for professional documentation of good governance initiatives: The objective of the scheme is to provide financial assistance up to ₹ 3 lakh to support professional documentation and dissemination of good governance initiatives by the state/UT governments. So far, 82 projects have been sanctioned. As per the revised scheme of providing financial assistance to the state governments/ UT administrations the professional documentation report will now be in e-book form instead of paper documentation and a short documentary film shall also be made by the state/UT government with the financial assistance of ₹ 3 lakh.

Production of Documentary Films on Best Practices: The Department is engaged in producing documentary films on best practices across the country. These films are useful for administration and dissemination of success stories which facilitate replication of the same elsewhere. Seventy-eight such documentary films have already been produced. These documentary films are available on the website of the Department as well as on YouTube.

Regional Conference: Regional conferences are organised on specific themes in association with various state/union territory governments with a view to bring national and state level organisations along with other stakeholders including NGOs, intelligentsia, media, etc. on the same platform to share experiences in the formulation and implementation of good governance practices.

Book on Best Practices: This Division publishes a book containing articles on select award winning good governance practices. These articles are on the initiatives that have been conferred Prime Minister's Award or National e-Governance Awards. This compilation is immensely useful for the administrators as the dissemination of success stories facilitates replication of the same elsewhere also. The Division has already published a series of books on the subject.

Minimum Government-Maximum Governance: Department of Administrative Reforms and Public Grievances is bringing out a periodical journal *Management in Government* (MIG) since 1969 and now renamed *Minimum Government-Maximum Governance* based on the best practices which were conferred Prime Minister's Award for Excellence in Public Administration and National e-Governance Awards and launched the first e-book in 2015.

International Exchange and Cooperation

The Department works as the nodal point in respect of matters relating to international cooperation in the field of public administration and governance, which includes organizing programmes as part of projects/bilateral measures taken up in accordance with the Memorandums of Understanding (MoUs)/ agreements signed between India and other countries (bilateral or multilateral). The purpose of the international cooperation component is to enable the sharing of information, best practices and personnel across national government. As a part of its international collaborative efforts, the Department of Administrative Reforms and Public Grievances (DARPG) explored the possibility of sharing and exchanging administrative experiences, the Department signed bilateral MOUs with Britain, France, Malaysia, Portugal, Singapore and China and trilateral MoU with South Africa and Brazil (under IBSA). This involves exchange of visits and undertaking programmes/projects and activities particularly in the area of pubic administration and delivery of services, so as to improve upon the current system of governance and instill a greater sense of responsiveness, accountability, transparency, and achieving public service excellence in the context of public service delivery good governance, public service reform, and capacity building and skills upgradation.

Cooperation with International Institute of Administrative Sciences

DARPG is an institutional member of International Institute of Administrative Sciences (HAS), Brussels, Belgium since 1998. Additional Secretary (DARPG) is on the Council of Administration (CoA) of HAS in ex-officio capacity. HAS membership has enabled the Gol to keep pace with the latest developments in the field of public administration, through participation in various programmes organized by these organisations as well as through various publications, journals and study reports issued by them.

Initiatives by National Centre of Good Governance

National Centre of Good Governance (NCGG) is an autonomous institute under DARPG which serves as a think tank for governance and policy reforms, cutting across administrative, social, economic and financial spheres. It functions as a national repository on information on

best practices, initiatives and methodologies that promote good governance, e-Governance, innovation and change management within the government.

Department of Personnel and Training

The role of the Department of Personnel & Training (DoPT) can be conceptually divided into two parts. In its large nodal role, it acts as the formulator of policy and the watch-dog of the government ensuring that certain accepted standards and norms, as laid down by it, are followed by all ministries/departments, in the recruitment, regulation of service conditions, posting/transfers, deputation of personnel as well as other related issues. It also advises all organisations of the central government on issues of personnel management. At a more immediate level, the DoPT has the direct responsibility of being the cadre controlling authority for the IAS and the three secretariat services in the Central Secretariat. The Department also operates the Central Staffing Scheme under which suitable officers from All India Services and Group 'A' Central Services are selected and then placed in posts at the level of Deputy Secretary/Director and Joint Secretary, on the basis of tenure deputation. The Department also deals with cases of appointment to posts of Chairman, Managing Director, and full-time functional Director/member of the board of management of various public sector undertakings/enterprises, corporations, banks and financial institutions. It also deals with the assignment of Indian experts to various developing countries. It is also responsible for formulation and coordination of training policies for the All India and Central Services and providing support for the capacity building of state government officials.

Website : www.dopt.gov.in

Recruitment Agencies

The two organisations through which the Department ensures recruitment of personnel for the government are the Union Public Service Commission (UPSC) and the Staff Selection Commission (SSC). The former is responsible for conducting examinations for appointment to the higher civil services and civil posts, including recruitment to the All India Services. There is a mandatory provision for consulting the Commission on all matters relating to methods of recruitment, principles

to be followed in making promotions and transfers from one service to another and on all disciplinary matters. The SSC is responsible for making recruitment to subordinate staff such as Assistants, Stenographers etc.

Some of the initiatives taken by the DoPT include:

(a) Discontinuation of interview for Gr. 'B' and 'C' posts

Interview has been dispensed with for recruitment by SSC to all Group 'C and Group 'B' (non-gazetted) from January 2016. This is applicable for recruitment in GoI ministries/attached/subordinate offices/autonomous bodies/PSUs. About 18 states and all the union territories, namely Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttarakhand, Andaman & Nicobar Islands, Chandigarh, Daman & Diu, Dadra & Nagar Haveli, Delhi, Lakshadweep and Puducherry have adopted the policy of discontinuation of interview in recruitments to lower level posts.

(b) Switching from OMR Based Exam to Computer

To improve transparency and reduce time taken to complete recruitment process, the government has switched over from the traditional OMR (Optical Mark Reader) mode to Computer Based Mode in respect of the various recruitment exams (*viz.,* CGLE, CHSLE, MTS level, etc.) conducted by SSC.

(c) Single Registration and Two Tier System of Examination

At present, candidates seeking government jobs have to appear for different examinations where similar eligibility conditions have been prescribed. Multiple recruitment examinations not only burden the candidates but also results in avoidable expenditure in the conducting of these examinations by various recruitment agencies. Government now proposes to introduce a common eligibility test to shortlist the candidates for vacancies of Group 'B' Non-Gazetted and below through a computer based/online mode test for Tier-I examination to be conducted by SSC. There will be common registration of candidates through National Career Service (NCS) portal. Final selection will be made through specialised Tier-ll examination to be conducted by individual recruitment agencies.

(d) Self-Certification for Appointment

From June 2016, the recruiting agencies now issue provisional appointment letters based on the self-certification of the candidates. The police verification is to be conducted within six months to confirm the appointment. The idea is to respose trust on the citizen and minimise delays due to police verification.

(e) Accelerated filling up of Divyaangjan Vacancies

Providing equal opportunity to *Divyaangjan,* a special recruitment drive was launched in May 2015 to fill up 15,694 vacancies of persons with disabilities in central government, of which 13,492 vacancies have already been filled up.

(f) Benefit of Reservation to ex-Servicemen

Earlier, ex-servicemen were provided one chance to join any civil employment. As per the new instructions, they will get a chance to join any of the choice post for which he/she had applied before joining the civil employment.

(g) Citizen Centricity in Administration

RTI online portal has been expanded to cover all public authorities registered with the Central Information Commisssion (CIC) for ease of access to inform the citizens. All public authorities have been aligned.

(h) Placement of Senior Appointment

It has been ensured that appointments and placements to senior positions are based on merit and integrity. Multi-source feedback for empanelment for the posts of Joint Secretary and above has been introduced. The Banks Board Bureau was established for conducting the selection for appointment to board level position in public sector banks. In order to increase the catchment area and to utilise the skill sets of executives working in the private sector/state PSEs, executives from the private (sector/state PSEs have also been made eligible for appointment to board level positions in Central Public Sector Enterprises.

(i) Anti-Corruption Strategies

Government of India has been following the policy of ”zero tolerance towards corruption”. The overall objectives of ”maximum governance minimum government” can only be realised if government and its

agencies work in an environment which is citizen centric, transparent and corruption free. In order to achieve these objectives, both preventive and punitive actions have been taken.

(j) Intensive Review for Premature Retirement

With a view to weed out ineffective, inefficient and officers of doubtful integrity, intensive review of records of all government employees is carried out under Rule FR 56 J and other corresponding provisions. Measures have been taken to compulsorily retire officers of doubtful integrity against whom frequent complaints and cases have been lodged after thorough scrutiny of the service records.

(k) Use of iGOT

The Integrated Government Online Training Programme was developed by Department of Personnel and Training in 2018. It is aimed at augmenting the existing training mechanism with online module-based training coupled with flexitime. The offered training is focussed and targeted to the requirement of the officials. The e-Learning mode provides unparalleled opportunities for training to a large number of civil servants scattered all over the country.

National Recruitment Agency

In order to provide the same test platform to all candidates at the nearest district headquarters, particularly those in rural areas/aspirational districts, and with a view to setting a new standard of equity and inclusiveness in recruitments, the government set up National Recruitment Agency (NRA) in August2020. NRA is an autonomous and self-reliant body to conduct Common Eligibility Test (CET) to shortlist the candidates for vacancies of Group ‘B’ Non-Gazetted posts; Group ‘B’ Gazetted posts, which are exempted from consultation with UPSC; and Group ‘C posts in the government and equivalent posts (where no such classifications exist) in instrumentalities of the government, through a computer-based online Tier-I examination.

The main objectives of NRA include : (i) to mitigate the hardship being faced by candidates who have to appear for multiple examinations conducted by multiple agencies, where similar eligibility conditions have been prescribed; (ii) to improve access to rural candidates by setting up a test centre in every district, particularly in the 11 7 aspirational districts;

(iii) to facilitate candidates to schedule tests and choose centre of their choice; (iv) to facilitate employment generation- in the longer run, the CET score could be shared with other recruiting agencies in the central government, state governments/union territories, public sector undertakings and private sector on MoU/cost sharing basis, for appointment in their organisations.

The NRA would be registered as a Society under the Societies Registration Act, 1860 with its HQ in Delhi NCR There would be a Governing Body consisting of Chairman (NRA) as Chairman, and Secretary, DoP&T or his representative, representatives of M/o Railways and D/o Financial Services, Chairman (SSC), Chairman (RRB), Chairman (IBPS), two experts from the field of academics, Secretary cum Controller of Examinations (NRA) as members. The NRA will have six Regional Offices in North, East, West, South, Central and North East, each headed by a Director/Deputy Secretary level officer.

Right to Information

The Right to Information Act, 2005 empowers the citizens, promotes transparency and accountability in the working of the government, combat corruption and make the democracy work for people in real sense. The Act aims at creating an informed citizenry, which would be better equipped to keep necessary vigil on the instruments of governance and make the government more accountable to the governed.

The Act gives all the citizens the right to seek information held by any authority or body or institution of self government established or constituted by or under the Constitution; or by any other law made by the Parliament or a state legislature; or by notification issued or order made by the central government or a state government. Bodies owned, controlled or substantially financed by the central government or a state government and non-government organisations substantially financed by the central government or a state government also fall within the definition of public authority. The right includes inspection of work, documents and records, taking notes, extracts or certified copies of documents or records, taking certified samples of material held by the public authority or held under the control of the public authority. It also includes information relating to any private body which can be accessed

by the public authority under any law for the time being in force. There are some categories of information which each public authority is required to publish *suo moto.*

One has to simply make a request to the Public Information Officer of the office indicating the information sought and the address at which the information is required. The request can be sent either by post or submitted in person in Hindi, English or in the official language of the area and can also be sent through e-mail. If the applicant does not get the information within 30 days or the applicant is not satisfied with the reply given to him, he can make an appeal within 30 days to the appel late authority appointed by the authority who is an officer superior to the Public Information Officer. The appellate authority has to decide the appeal within 30 days of the receipt of appeal. If the applicant is not satisfied even with the decision of the appellate authority, he can file a second appeal with the Central Information Commission or the State Information Commission, as the case may be within 90 days. The Central Information Commission entertains appeals in respect of offices, financial institutions, public sector undertakings, etc. under the central government and the union territories and a State Information Commission deals with the appeals pertaining to offices, financial institutions, public sector undertakings, etc. under the concerned state government.

The Central Information Commission/State Information Commissions are high-powered independent bodies created by the Act, and they can impose penalty on the defaulting Public Information Officers. This comprehensive law covers almost all levels of governance, and are applicable not only to union, state and local governments but also to the recipients of government grants. Access to information under this Act is extensive with minimum exemptions. The Right to Information Act has converted the prevailing culture of secrecy into culture of openness and transparency in the working of the government.

Official Language

Article 343 (1) of the Constitution provides that Hindi in Devanagari script shall be the official language of the Union. Article 343 (2) also provides for continuing the use of English in official work of the Union

for a period of 15 years (i.e., up to January 25, 1965) from the date of commencement of the Constitution. Article 343 (3) empowered the Parliament to provide by law for continued use of English for official purposes even after January 25, 1965. The Act also lays down under Section 3 (3) that both Hindi and English shall compulsorily be used for certain specified purpose such as resolutions, general orders, rules, notifications, administrative and other reports, press communiques; administrative and other reports and official papers to be laid before a House or the Houses of Parliament; and contracts, agreements, licences, permits, tender notices and forms of tender, etc.

With a view to ensuring compliance of the constitutional and legal provisions regarding official language and to promote the use of Hindi for the official purposes of the Union, the Department of Official Language was set up in 1975 as an independent department of the Ministry of Home Affairs. Since then, this Department has been making efforts for accelerating the progressive use of Hindi for the official purposes of the Union. In accordance with the Government of India (Allocation of Business) Rules, 1961, this Department has been entrusted with the following items of work that include: co-ordination in all matters relating to the progressive use of Hindi as the Official Language of the Union, including administrative terminology, syllabi, textbooks, training courses and equipment (with standardised script) required therefor; and matters relating to the Kendriya Hindi Samiti and the Central Translation Bureau, etc.

In 1976, Official Language Rules were framed under the provisions of Section 8 (1) of the Official Languages Act, 1963 as amended in 1967. Salient features of the rules are as under: (i) They apply to all central government offices, including any office of a Commission, Committee or Tribunal appointed by the central government and corporation or company owned or controlled by the central government except Tamil Nadu; (ii) Communications from a central government office to state/union territories or to any person in region ‘A’ comprising Uttar Pradesh, Uttarakhand, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Rajasthan, Haryana and union territories of Andaman and Nicobar Islands and Delhi, shall be in Hindi; (iii) Communications from a central government office to states/union territories in region ‘B’ comprising Punjab, Gujarat, Maharashtra and the union territory of

Chandigarh, Daman and Diu and Dadra and Nagar Haveli shall ordinarily be in Hindi and if any communication is issued to any of them in English, it shall be accompanied by a Hindi translation thereof; (iv) Communications from a central government officer to state or union territory in Region 'C or to any office (not being a central government office) or person in such state shall be in English; and (v) Communications between central government offices in region 'C to a state or union territory of Region 'A' or Region 'B' or to any office (not being a central government office) or persons in such state may be either in Hindi or English.

Website : www.rajbhasha.nic.in

Official Language Policy

The features of Official Language Policy are: (i) all manuals, codes and other procedural literature relating to central government offices are required to be prepared both in Hindi and English. All forms, headings of registers, name plates, notice boards and various items of stationery, etc. are also required to be in Hindi and English; (ii) officers should ensure that documents specified in Section 3 (3) of the Act are issued both in Hindi and English; and (iii) the administrative head of each central government office should ensure that the provisions of the Act, the rules and directions issued under Rule 12 shall be properly complied with, and suitable and effective check-points shall be devised for this purpose.

Annual Programme

In compliance with the Official Language Resolution, 1968, an annual programme is prepared by the Department of Official Language in which targets are set for the offices of the central government with regard to originating correspondence, replies in Hindi to letters in Hindi, recruitment of Hindi typists and stenos, websites, inspections and meetings of Hindi Salahakar Samiti and Official Language Implementation Committees, purchase of Hindi books for libraries, and purchase of electronic equipment. A quarterly progress report is submitted by the offices of the central government regarding achievements *visa-vis* the said targets. An Annual Assessment Report is prepared on the basis of these reports, which is laid on the tables of both Houses of the Parliament, and its copies are endorsed to state governments and the ministries/departments of the central government.

Committees/Samitis

The Kendriya Hindi Samiti was constituted in 1967. Chaired by the Prime Minister, it is the apex policy-making body, which lays the guidelines for the propagation and progressive use of Hindi as official language of the Union. The Committee of Parliament on official language was constituted in 1976 to periodically review the progress in the use of Hindi as the official language of the Union and to submit a report to the President.

Award Schemes

The Department has Rajbhasha Keerti Puraskar Yojana for awarding the outstanding achievements in the implementation of Official Language Policy of the Union. Under the Rajbhasha Gaurav Hindi Book Writing Scheme, cash awards, shields and certificates are awarded to the working/retired employees of the central government, banks, financial institutions, universities, training institutions and autonomous bodies of the central government for writing original books in Hindi. At a zonal level, Zonal Official Language Awards are given annually to the central government offices, public sector undertakings, banks and financial institutions of the central government for outstanding achievements in implementing the Official Language Policy of the Union, and for progressive use of Hindi.

Inter-State Council

The provision for setting up an Inter-State Council is mentioned in Article 263 of the Constitution. In pursuance of the recommendation made by the Sarkaria Commission on Centre-State Relations, the Inter-State Council was set up in 1990. The Inter-State Council (ISC) is a recommendatory body and has been assigned the duties of investigating and discussing such subjects, in which some or all of the states or the union territories and one or more of the states have a common interest, for better coordination of policy and action with respect to that subject. It also deliberates upon such other matters of general interest to the states as may be referred by the Chairman to the Council.

The Prime Minister is the Chairman of the Council. Chief Ministers of all the states and union territories having legislative assemblies; administrators of union territories not having legislative assemblies; and

governors of states under President's rule and six ministers of cabinet rank in the Union Council of Ministers, nominated by the Chairman of the Council, are members of the Council.

Website: www.interstatecouncil.nic.in

Zonal Council

Five zonal councils *viz.,* Northern Zonal Council, Central Zonal Council, Eastern Zonal Council, Western Zonal Council and Southern Zonal Council were set up vide Part-Ill of the States Re-organisation Act, 1956, with the objectives of bringing out national integration; arresting the growth of acute state consciousness, regionalism, linguism and particularistic tendencies; enabling the centre and the states to cooperate and exchange ideas and experiences; and establishing a climate of cooperation amongst the states for successful and speedy execution of development projects.

Composition of Zonal Councils

Zonal Council	**Member States/Union Territories**
Northern Zonal Council	Haryana, Punjab, Himachal Pradesh, Rajasthan, National Capital Territory of Delhi and the Union Territories of Chandigarh, Jammu and Kashmir and Ladakh
Central Zonal Council	Uttarakhand, Uttar Pradesh, Chhattisgarh and Madhya Pradesh
Eastern Zonal Council	Bihar, Jharkhand, West Bengal and Odisha
Western Zonal Council	Gujarat, Maharashtra, Goa and the Union Territories of Dadra and Nagar Haveli and Daman and Diu
Southern Zonal Council	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Telangana and the Union Territory of Puducherry

Organisational Structure of Zonal Councils

The Union Home Minister is the Chairman of all the zonal councils. The Office of the Vice-Chairman is held by the Chief Minister of the Member State of the respective zonal council by annual rotation, each holding office for a period of one year at a time. Two other ministers of each member state are also members of each Zonal Council. The Chief Secretary of the Member State function as the Secretary of respective Zonal Council by annual rotation and another officer/ Development Commissioner and one officer nominated by the Planning Commission for each of the Zonal Councils as Adviser for a period of one year.

The States

The system of government in states closely resembles that of the Union.

Executive

Governor

A state executive consists of Governor and Council of Ministers with Chief Minister as its head. The Governor of a state is appointed by the President for a term of five years in office. Only Indian citizens above 35 years of age are eligible for appointment to this office. Executive power of the state is vested in Governor.

The Council of Ministers with the Chief Minister as head, aids and advises Governor in exercise of his functions except in so far as he is by or under the Constitution required to exercise his functions or any of them in his discretion. In respect of Nagaland, the Governor has special responsibility under Article 371 A of the Constitution with respect to law and order and even though it is necessary for him to consult Council of Ministers in matters relating to law and order, he can exercise his individual judgement as to the action to be taken.

Similarly, in respect of Arunachal Pradesh, the Governor has special responsibility under Article 371 H of the Constitution with respect to law and order. Governor shall, after consulting Council of Ministers, exercise his individual judgement as to the actions to be taken. These are, however, temporary provisions. If the President, on receipt of a report from Governor or otherwise is satisfied that it is no longer necessary for

Governor to have special responsibility with respect to law and order, he may so direct by an order.

Likewise, in the Sixth Schedule which applies to tribal areas of Assam, Meghalaya, Tripura and Mizoram as specified in para 20 of that schedule, discretionary powers are given to Governor in matters relating to sharing of royalties between district council and state government. The Sixth Schedule vests additional discretionary powers in Governors of Mizoram and Tripura in almost all their functions (except approving regulations for levy of taxes and money lending by non-tribals by district councils) since December 1998. In Sikkim, the Governor has been given special responsibility for peace and social and economic advancement of different sections of population.

All Governors while discharging such constitutional functions as appointment of Chief Minister of a state or sending a report to the President about failure of constitutional machinery in a state or in respect of matters relating to assent to a bill passed by legislature, exercise their own judgement.

Council of Ministers

The Chief Minister is appointed by the Governor who also appoints other ministers on the advice of the Chief Minister. The Council of Ministers is collectively responsible to the Legislative Assembly of the state.

Legislature

For every state, there is a legislature which consists of Governor and one House or, two Houses as the case may be. In Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana and Uttar Pradesh, there are two Houses known as the Legislative Council and Legislative Assembly. In the remaining states, there is only one House known as Legislative Assembly. Parliament may, by law, provide for abolition of an existing Legislative Council or for creation of one where it does not exist, if a proposal is supported by a resolution of the Legislative Assembly concerned.

Legislative Council

Legislative Council *(Vidhan Parishad)* of a state comprises not more than one-third of total number of members in Legislative Assembly of the state and in no case less than 40 members. About one-third of members of the Council are elected by members of Legislative Assembly from amongst persons who are not its members, one-third by electorates consisting of members of municipalities, district boards and other local authorities in the state, one-twelfth by electorate consisting of persons who have been, for at least three years, engaged in teaching in educational institutions within the state not lower in standard than secondary school and a further one-twelfth by registered graduates of more than three years standing. Remaining members are nominated by the Governor from among those who have distinguished themselves in literature, science, art, cooperative movement and social service. Legislative Councils are not subject to dissolution but one-third of their members retire every second year.

Legislative Assembly

Legislative Assembly *(Vidhan Sabha)* of a state consists of not more than 500 and not less than 60 members (Legislative Assembly of Sikkim has 32 members vide Article 371 F of the Constitution) chosen by direct election from territorial constituencies in the state. Demarcation of territorial constituencies is to be done in such a manner that the ratio between population of each constituency and number of seats allotted to it, as far as practicable, is the same throughout the state. Term of an Assembly is five years unless it is dissolved earlier.

Powers and Functions

State legislature has exclusive powers over subjects enumerated in List II of the Seventh Schedule of the Constitution and concurrent powers over those enumerated in List III. Financial powers of the legislature include authorisation of all expenditure, taxation and borrowing by the state government. Legislative Assembly alone has power to originate money bills. Legislative Council can make only recommendations in respect of changes it considers necessary within a period of 14 days of the receipt of money bills from Assembly. The Assembly can accept or reject these recommendations.

Reservation of Bills

The Governor of a state may reserve any bill for the consideration of the President. Bills relating to subjects like compulsory acquisition of property, measures affecting powers and position of High Courts and imposition of taxes on storage, distribution and sale of water or electricity in inter-state river or river valley development projects should necessarily be so reserved. No bills seeking to impose restrictions on inter-state trade can be introduced in a state legislature without previous sanction of the President.

Control over Executive

State legislatures, apart from exercising the usual power of financial control, use all normal parliamentary devices like questions, discussions, debates, adjournments and no-confidence motions and resolutions to keep a watch over day-to-day work of the executive. They also have their committees on estimates and public accounts to ensure that grants sanctioned by legislature are properly utilised.

Union Territories

Union territories are administrated by the President acting to such extent, as he thinks fit, through an administrator appointed by him. Administrators of Andaman and Nicobar Islands, Delhi, Puducherry, Jammu and Kashmir and Ladakh are designated as Lieutenant Governors. The Governor of Punjab is concurrently the administrator of Chandigarh. Lakshadweep has a separate administrator.

The National Capital Territory of Delhi, Union Territories of Jammu and Kashmir and Puducherry each has a Legislative Assembly and Council of Ministers. The Legislative Assembly of the Union Territory of Puducherry may make laws with respect to matters enumerated in List II or List III in the Seventh Schedule of the Constitution in so far as these matters are applicable in relation to the union territory. The Legislative Assembly of National Capital Territory of Delhi has also these powers with the exceptions that entries 1, 2 and 18 of the List II are not within the legislative competence of the Legislative Assembly. Certain categories of bills, however, require the prior approval of the central government for introduction in the Legislative Assembly. Some bills, passed by the Legislative Assembly of the UT of Puducherry and

National Capital Territory of Delhi are required to be reserved for consideration and assent of the President.

Local Government

Municipalities

Municipal bodies have a long history in India. The first such Municipal Corporation was set up in the former Presidency Town of Madras in 1688, and later in Bombay and Calcutta in 1726. The Constitution of India has made detailed provisions for ensuring protection of democracy in Parliament and in the state legislatures. However, the Constitution did not make the local self-government in urban areas a clear-cut constitutional obligation. While the Directive Principles of State Policy refer to Village Panchayats, there is no specific reference to municipalities except the implicity in Entry 5 of the State List, which places the subject of local self-government as a responsibility of the states.

In order to provide for a common framework for urban local bodies and help to strengthen the functioning of the bodies as effective democratic units of self-government, Parliament enacted the Constitution (74th Amendment) Act, 1992 (known as Nagarpalika Act) relating to municipalities in 1992. It came into effect in 1993. A new Part IX-A relating to the municipalities added to provide for among other things, constitution of three types of municipalities, i.e., *Nagar Panchayats* for areas in transition from a rural area to urban area, Municipal Councils for smaller urban areas and Municipal Corporation for large urban areas, fixed duration of municipalities, appointment of State Election Commission, appointment of State Finance Commission and constitution of metropolitan and district planning committees. All state/union territories administrations have set-up their State Election Commissions and Finance Commissions.

Panchayats

Article 40 of the Constitution which enshrines the Directive Principles of State Policy lays down that the state shall take steps to organise village *panchayats* and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.

A new Part IX relating to the *panchayatswas* inserted in the Constitution to provide for among other things, Gram Sabha in a village or group of villages; constitution of *panchayats* at village and other level or levels; direct elections to all seats in *panchayats* at the village and intermediate level, if any, and to the offices of Chairpersons of *panchayats* at such levels; reservation of seats for the scheduled castes and scheduled tribes in proportion to their population for membership of *panchayats* and office of Chairpersons in *panchayats* at each level; reservation of not less than one-third of the seats for women; fixing tenure of five years for *panchayats* and holding elections within a period of six months in the event of supersession of any *panchayat.*

Election Commission

The Election Commission of India (ECI) was constituted in 1950 with its headquarters at New Delhi. It is a permanent independent constitutional body vested with the powers and responsibility of superintendence, direction and control of the entire process of conduct of elections to Parliament and to legislatures of the states and the union territories and elections to the offices of President and Vice-President held under the Constitution.

The Election Commission decides the election schedules for conducting of elections—both general elections and bye-elections. It prepares, maintains and periodically updates the electoral rolls, supervises the nomination of candidates, registers political parties, monitors the election campaign, including funding and expenditure of candidates. It also facilitates the coverage of the election process by the media; carries out the voter education and awareness measures; organises the polling stations/booths where voting takes place; and oversees the counting of votes and the declaration of results. It conducts polling through EVMs (Electronic Voting Machines) and recently, on pilot basis, introduced WPAT (Voter Verifiable Paper Audit Trail). The Election Commission has also provided for compulsory identification at the time of voting by means of Electors' Photo Identity Cards (EPICs) and distribution of photo slip close to polls.

Elections are conducted according to the constitutional provisions, supplemented by laws made by Parliament. The major laws are the

Presidential and Vice-Presidential Elections Act, 1952; the Representation of the People Act, 1950; and the Representation of the People Act, 1951. All political parties are required to get themselves registered with the Election Commission. Based on performance criteria laid down in the Elections Symbols (reservation & allotment) Order 1968, the Commission grants recognition to political parties as national or state parties. It also decides disputes relating to splits/mergers of recognised political parties.

At the state level, the election work is supervised, subject to overall control of the Commission, by the Chief Electoral Officer of the state, who is appointed by the Commission by selection from amongst senior civil servants of the state government. Field administration at the district and sub-divisional levels in India is run by the District Magistrates (Deputy Commissioners/Collectors), Sub-Divisional Magistrates, Revenue Divisional Officers, Tehsildars, etc. The Election Commission utilises these state government officers, for election work, by designating them as District Election Officers, Electoral Registration Officers, Returning Officers, Assistant Electoral Registration Officers, Assistant Returning Officers, etc. During election time, however, they are available to the Commission, more or less, on a full-time basis.

Election Commission of India launched the India International Institute of Democracy and Election Management (IIIDEM), an advanced resource centre of learning, research, training and extension for electoral democracy and election management. The Institute presently functions from New Delhi. Courses are conducted in the Institute for ECl's field officials and also for participants from abroad. The Commission is increasingly sharing its expertise and experience with election management bodies of other countries, and providing electoral assistance and training based on bilateral requests and multi-lateral arrangements. ECI has MoUs with 16 countries, besides having MoUs with UNDP, International IDEA and IFES.

Website: www.eci.gov.in

4 Agriculture

AGRICULTURE plays a vital role in India's economy. About 54.6 per cent of the population is engaged in agriculture and allied activities (Census 2011) and it contributed 17.8 per cent to the country's Gross Value Added for the year 2019-20 (at current prices). Given the importance of agriculture sector, Government of India took several steps for its sustainable development. Steps have been taken to improve soil fertility on a sustainable basis through the soil health card scheme, to provide improved access to irrigation and enhanced water efficiency through Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), to support organic farming through Paramparagat Krishi Vikas Yojana (PKVY) and to support for creation of a unified national agriculture market to boost the income of farmers. Further, to mitigate risk in agriculture sector, a new scheme, "Pradhan Mantri Fasal Bima Yojana" (PMFBY) was launched for implementation from Kharif 2016.

The Department of Agriculture, Cooperation and Farmers' Welfare (DAC&FW) is one of the two constituent departments of the Ministry of Agriculture and Farmers' Welfare. The other being Department of Agricultural Research and Education (DARE).

Websites : www.agriculture.gov.in

www.agricoop.nic.in

www.dare.nic.in

Production

The normal spell of rainfall during monsoon 2017 and the various policy initiatives taken by the government made it possible to achieve a broad-based record foodgrain production in the year 2017-18. As per the Fourth Advance Estimates for 2017-18, total foodgrain production in the country is estimated at 284.83 million tonnes which is higher than what was produced during 2016-17. The production during 2017-18 was higher

by 24.66 million tonnes than the previous five years' (2012-13 to 2016-17) average production of foodgrain.

National Policy for Farmers

Government of India approved the National Policy for Farmers (NPF) in 2007. Many of the provisions of the NPF are being operationalised through various schemes and programmes which are being implemented by different central government departments and ministries. For the operationalisation of the remaining provisions of the Policy, an Action Plan was finalised and circulated to the ministries/departments concerned, as well as to all states/UTs for necessary follow-up action.

Major Programmes

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

The scheme has been approved with an outlay of ₹ 50,000 crore for a period of 5 years (2015-16 to 2019-20). The major objective of PMKSY is to: achieve convergence of investments in irrigation at the field level; expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water; enhance the adoption of precision irrigation and other water saving technologies (Per drop, More crop); and promote sustainable water conservation practices etc. Cabinet decision was taken in July 2016 for implementation of PMKSY in a mission mode. The mission is administered by Ministry of Water Resources, River Development and Ganga Rejuvenation with the Per Drop More Crop component being administered by Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW).

Agriculture Credit

Government announces annual target for agriculture credit in the budget every year. Agricultural credit flow has shown consistent progress every year. The target for the year 2016-17 was fixed at ₹ 9,00,000 crore and against this target the achievement was ₹ 10,65,756 crore. The agriculture credit flow target for 2017-18 has been fixed at ₹ 10,00,000 crore. The department implements the Interest Subvention Scheme under which interest subvention is provided on short-term crop loans upto ₹ 3 lakh for a period of one year which is made available to farmers at

subvented interest rate of 7 per cent per annum and in case of timely repayment, the same gets reduced to 4 per cent per annum.

Crop Insurance

In order to protect farmers against crop failure due to natural calamities, pests and diseases, weather conditions, Government of India introduced the National Crop Insurance Programme (NCIP) with component schemes of Modified National Agricultural Insurance Scheme (MNAIS), Weather Based Crop Insurance Scheme (WBCIS) and Coconut Palm Insurance Scheme (CPIS). In addition, National Agricultural Insurance Scheme (NAIS) which was withdrawn after implementation of NCIP from Rabi 2013-14 was extended further up to 2015-16. A new scheme ”Pradhan Mantri Fasal Bima Yojana (PMFBY) was implemented from Kharif 2016 along with restructured pilot Unified Package Insurance Scheme (UPIS) and Weather Based Crop Insurance Scheme (WBCIS).

Commission for Agricultural Costs and Prices

Commission for Agricultural Costs and Prices (CACP), set up with a view to evolve a balanced and integrated price structure, is mandated to advice on the price policy (MSP) of 23 crops. These include seven cereal crops (paddy, wheat, jowar, bajra, maize, ragi and barley); five pulse crops (gram, tur, moong, urad and lentil); seven oilseeds (groundnut, sunflower seed, soyabean, rapeseed mustard, safflower, nigerseed and sesamum); copra (dried coconut); cotton; raw jute and sugarcane. CACP submits its recommendations in the form of Price Policy Reports every year, separately for five groups of commodities namely kharif crops, rabi crops, sugarcane, raw jute and copra.

Determinants of MSP

Cost of Production (CoP) is one of the important factors in the determination of MSP of mandated crops. Besides cost, the Commission considers other important factors such as demand and supply, price trend in the domestic and international markets, inter-crop price parity, terms of trade between agricultural and non-agricultural sectors and the likely impact of MSP on consumers, in addition to ensuring rational utilisation of natural resources like land and water. Thus, pricing policy is rooted not in ‘cost plus’ approach, though cost is an important determinant of MSP.

Indian Council of Agricultural Research

The Indian Council of Agricultural Research (ICAR) is an autonomous organisation under the Department of Agricultural Research and Education (DARE). Formerly known as Imperial Council of Agricultural Research, it was established on July 16,1929 as a registered society under the Societies Registration Act, 1860. With its headquarters at New Delhi, the ICAR is the apex body for coordinating, guiding, and managing research and education in agriculture including horticulture, fisheries and animal sciences. With 101 ICAR institutes and 71 agricultural universities spread across the country, this is one of the largest national agricultural systems in the world. The ICAR has played a pioneering role in ushering the Green Revolution and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase the production of foodgrains by 5.4 times, horticultural crops by 10.1 times, fish by 15.2 times, milk 9.7 times and eggs 48.1 times from 1951 to 2017. This has enabled a visible impact on the national food and nutritional security. It has played a major role in promoting excellence in higher education in agriculture.

Website : www.icar.org.in

Soil and Water Productivity

The National Bureau of Soil Survey and Land Use Planning (NBSS&LUP) developed NBSS BHOOMI Geo-portal to access various thematic information on major physiographic regions, sub-physiographic regions, agro-ecological regions (1992), agro-ecological regions (2015) and agroecological sub-regions of the country. Area/region specific efficient and remunerative crops and cropping sequences were delineated based on soils, landforms, rainfall, temperature, length of growing period and irrigability. The NBSS&LUP developed an android-based mobile application on GIS platform to facilitate web-based decision support system (DSS) for land use planning and dissemination of soil health cards information at village and farm level for Gujarat. App will display details of soil map unit information and suggested land use plan for that survey number.

Genetic Resources

Major explorations were undertaken and 1,532 germplasm accessions were collected, comprising 1,095 of cultivated plants and 437 wild accessions. The explorations were undertaken two each in Andhra Pradesh, Assam, Chhattisgarh, Maharashtra, Tamil Nadu, Uttar Pradesh, West Bengal and one each in Andaman and Nicobar, Arunachal Pradesh, Karnataka, Nagaland, Odisha, Tripura and Uttarakhand. The population of *momordica cochinchinensis,* collected from the middle Andaman Island, was described as a new sub-species *momordica cochinchinensis subsp. andamanica,* which was subsequently validated through DNA barcoding.

Crop Improvement

Major emphasis was given to develop new varieties/hybrids tolerant to various biotic and abiotic stresses with enhanced quality. About 209 varieties were developed, 117 high-yielding varieties/hybrids of cereals comprising 65 of rice, 14 of wheat, 24 of maize, 5 of finger millet, 3 of pearl millet, 1 each of sorghum, barley, foxtail millet, kodo millet, little millet and proso millet and released for cultivation in different agro-ecological regions of the country. About 28 high-yielding varieties of oil seeds, 32 of pulses, 24 of commercial crops (cotton, sugarcane and jute) and eight of forage crops were released for cultivation in different agroecologies.

Livestock

Improvement of indigenous cattle breeds through selection project was conceptualised for the genetic improvement of Gir, Kankrej and Sahiwal cattle in their home tracts. Under the network project of buffalo improvement, Nli-Ravi, Bhadawari and Swamp breed centres are functioning as conservation and improvement units whereas Jaffarabadi, Pandarpuri and Surti breed centres are concentrating on field progeny testing and maintaining the elite herd for bull production and a breedable herd of 567. All India Coordinated Research Project (AICRP) on goat improvement covered 13 tribal villages and contributed for a better livelihood security for tribal people as goats are major source of income

to poor people in tribal areas and north-eastern hill region. Under AICRP on poultry breeding all the 12 centres are working on the development of locaton specific rural chicken varieties.

Crop Management

A long-term tillage experiment in maize-wheat and rice-wheat system indicated that the wheat crop was not affected by tillage in rice or maize. Enhancing crop yield per unit water use through improved agro-techniques involving sprinklers in summer greengram indicated higher stability in Samrat over IPM 205-7. Sprinkler irrigation resulted in less water use (26.3 per cent) with higher water productivity (43.2 percent) and net return (28.4 percent) over flood irrigation.

Animal Husbandry, Dairying and Fisheries

Animal Husbandry, Dairying and Fisheries activities, along with agriculture, continue to be an integral part of human life since the process of civilisation started. These activities have contributed not only to the food basket and draught animal power but also by maintaining ecological balance. Owing to conducive climate and topography, animal husbandry, dairying and fisheries sectors have played a prominent socio-economic role in India. Traditional, cultural and religious beliefs have also contributed in the continuance of these activities. They further also play a significant role in generating gainful employment in the rural sector, particularly among the landless, small and marginal farmers and women, besides providing cheap and nutritious food to millions of people.

Livestock production and agriculture are intrinsically linked, each being dependent on the other, and both crucial for overall food security. Livestock sector is an important subsector of the agriculture of Indian economy. It forms an important livelihood activity for most of the farmers, supporting agriculture in the form of critical inputs, contributing to the health and nutrition of the household, supplementing incomes, offering employment opportunities, and finally being a dependable ”bank on hooves” in times of need. It acts as a supplementary and complementary enterprise.

India has a vast resource of livestock and poultry, which play a vital role in improving the socio-economic conditions of rural masses. There are about 300 million bovines, 65.07 million sheep, 135.2 million goats and about 10.3 million pigs as per 19th livestock census in the country.

Livestock Production

Livestock production and agriculture are intrinsically linked, each being dependent on the other, and both crucial for overall food security. According to estimates of the Central Statistics Office (CSO), the value of output livestock sector at current prices was about ₹ 5,91,691 crore during 2015-16, which is about 28.5 per cent of the value of output from agricultural and allied sector. At constant prices the value of output from livestock is about 29 per cent of the value of the output from total agriculture and allied sector. India continues to be the largest producer of milk in the world. Several measures have been initiated to increase the productivity of livestock.

Milk Production

Milk production during 2016-17 and 2017-18 was 165.4 million tonnes and 176.3 million tonnes respectively showing an annual growth of 6.62 per cent. The per capita availability of milk was around 375 grams per day in 2017-18.

Egg Production

Poultry production has taken a quantum leap in the last four decades, emerging from an unscientific farming practice to commercial production system with state-of-the art technological interventions. Egg production at the end of the Tenth Plan (2006-07) was 50.70 billion as compared to 66.45 billion at the end of the Eleventh Plan (2011-12).

Wool Production

Wool production declined marginally at the end of Eleventh Five Year Plan (2011 -12) to 44.7 million kg from 45.1 million kg in the end of Tenth Five Year Plan (2006-07). Wool production in the beginning of Twelfth Plan (2012-13) was 46.05 million kgs and increased to 48.1 million kgs in 2014-15 but declined to 43.5 million kgs in 2016-17. The production has shown negative growth during 2017-18.

Meat Production

The meat production registered a healthy growth from 2.3 million tonnes at the end of Tenth Five Year Plan (2006-07) to 5.5 million tonnes at the end of the Eleventh Five Year Plan (2011 -12). Meat production in the beginning of Twelfth Plan (2012-13) was 5.95 million tonnes which further increased to 7.7 million tonnes.

Fisheries' Production

The country has vast potential for fisheries in view of long coastline of about 8,118 kms apart from the inland water resources.

National Livestock Mission

For sustainable and continuous growth of livestock sector by emulating the success achieved in dairy and poultry sectors, across species and regions, the National Livestock Mission was launched in 2014-15 with an approved outlay of ₹ 2,800 crore during XII Plan. This Mission is formulated with the objectives of sustainable development of livestock sector, focusing on improving availability of quality feed and fodder, risk coverage, effective extension, improved flow of credit and organisation of livestock farmers/rearers, etc., with the following submissions: (i) sub-mission on livestock development; (ii) sub-mission on pig development in north-eastern region; (iii) sub-mission on fodder and feed development; and (iv) sub-mission on skill development, technology transfer and extension.

Livestock Health

With improvement in the quality of livestock through cross-breeding programmes, the susceptibility of these livestock to various diseases including exotic diseases has increased. In order to reduce morbidity and mortality, efforts are being made by the state/union territory governments to provide better health care through polyclinics/veterinary hospitals, dispensaries and first-aid centers including mobile veterinary dispensaries available in the states.

In order to provide referral services, over and above the existing disease diagnostic laboratories in the states, one central and five regional disease diagnostic laboratories have been established which are now fully functional. Further, for control of major livestock and poultry diseases by way of prophylactic vaccination, the required quantity of vaccines are

being produced in the country at 27 veterinary vaccine production units including 20 in the public sector. While efforts are made to ensure better livestock health in the country, efforts are also being made to prevent ingress of diseases from outside the country, and to maintain standards of veterinary drugs and formulations. At present, the Drugs Controller General of India regulates the quality of veterinary drugs and biologicals.

Livestock Census

The first livestock census was conducted during 1919-20 and since then it is being conducted quinquennially by all states/UTs of the country. It is the only source, which gives disaggregated information on various species of farm animals and poultry birds. The 20th Livestock Census was conducted in 2019 in the country in participation with animal husbandry departments of the states/UTs. It indicates that the total livestock population in the country increased by 4.6 per cent to 536 million from 510.06 million in 2012.

Rashtriya Gokul Mission

The Rashtriya Gokul Mission (RGM) is being implemented for the development and conservation of indigenous bovine breeds since December 2014. It is crucial for the upliftment of rural poor as more than 80 per cent low producing indigenous animals are with small and marginal farmers and landless/ labourers. The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and making dairying more remunerative to the rural farmers of the country. The scheme is leading to multiplication of elite animals of indigenous breeds and increased availability of indigenous stock. The scheme has been implemented with the following objectives: (i) to enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies; (ii) to propagate use of high genetic merit bulls for breeding purposes; (iii) to enhance artificial insemination coverage through strengthening breeding network and delivery of artificial insemination services at farmers' doorstep; and (iv) to promote indigenous cattle and buffalo rearing and conservation in a scientific and holistic manner.

Indian Fisheries

Presently India is the second largest fish producing and second largest aquaculture nation in the world after China. The total fish production

during 201718 (provisional) stood at 12.61 million metric tonnes (MMT) with a contribution of 8.92 MMT from the inland sector and 3.69 MMT from the marine sector.

Fisheries is a sunrise sector with varied resources and potential, engaging over 14.50 million people at the primary level and many more along the value chain. Transformation of the fisheries' sector from traditional to commercial scale has led to an increase in fish production.

The historical scenario of Indian fisheries reveals a paradigm shift from marine dominated fisheries to a scenario where inland fisheries emerged as a major contributor to the overall fish production in the country.

Within inland fisheries, there is a shift from capture fisheries to aquaculture during the last two and a half decades. Freshwater aquaculture with a share of 34 per cent in inland fisheries in mid-1980s has increased to about 80 per cent in recent years. It has emerged as a major fish producing system. Fish Farmers Development Agencies (FFDA) were set up in various districts for delivering a package of technologies, practices, training and extension and for providing financial assistance to the beneficiaries. Mariculture in the country over the years was confined largely to bivalve molluscs viz., mussels, edible oysters and pearl oysters, and to some extent seaweeds. With a thrust on development of technologies pertaining to sea cage farming during the last decade, developmental plans with both forward and backward linkages are envisaged to allow these activities to become significant contributors to production of seafood in the country.

5 Culture and Tourism

THE mandate of the Ministry of Culture revolves around the functions like preservation and conservation of ancient cultural heritage and promotion of art and culture both tangible and intangible in the country. The Ministry has two attached, six subordinate offices and 35 autonomous organisations, which are fully funded by the government. There are seven zonal cultural centres working mainly on folk and traditional arts. There are also four missions, namely, National Mission for Manuscripts, National Mission for Monument and Antiquities, National Mission on Libraries, and Gandhi Heritage Sites Mission. Broadly, this ministry is working on the protection, development and promotion of all types of heritage of culture namely, tangible heritage, intangible heritage and knowledge heritage. In addition, the Ministry also harbours the responsibility of Gandhian heritage and commemoration of important historical events and centenaries of great personalities. In tangible heritage, the Ministry takes care of all the centrally protected monuments of national importance, which is achieved through Archeological Survey of India. Similarly, the Ministry is also promoting a museum movement in the country and majority of the museums are under its administrative control. It also promotes regional museums through grants-in-aid.

In the field of intangible heritage, the Ministry extends financial support to individuals, group of individuals and cultural organisations engaged in performing visual and literary arts. Similarly, the Ministry through its organisations, is engaged in recognising excellence in the field of art and culture by way of awards given by institutions like Sahitya Akademi and Sangeet Natak Akademi. The National School of Drama is involved in promoting a vibrant theatre movement of contemporary relevance in the context of our traditions and cultural diversity.

In knowledge heritage, the Ministry is the custodian of all the major libraries in the country. It also extends grant-in-aid for library

development and is also responsible for all policy matters regarding library development. Through National Archives of India, the Ministry is responsible for maintenance of all archival records of the country. It is also involved in protection and promotion of Buddhist and Tibetian Culture and is doing this through various institutions located at Sarnath, Varanasi and Leh. This Ministry has a very well-planned capacity-building programme for all those who want to excel in the field of Indian as well as Asian art and culture. Institutions like the School of Archaeology, School of Archives, National Institute of History and Art, Maulana Abul Kalam Azad Institute of Asian Studies are mentionable in this regard. Various courses offered by the National School of Drama and Kalakshetra Foundation are also some of the examples of capacity building programmes of the Ministry. The Ministry is also responsible for the implementation of various UNESCO conventions in the field of culture and for entering into Cultural Exchange Agreements with partnering countries. India has Cultural Agreements with 107 countries and agreements relating to Cultural Exchange Programmes have been signed with 69 countries.

Website: www.indiaculture.nic.in

Lalit Kala Akademi

Lalit Kala Akademi, the National Academy of Art, was set up in 1954. Lalit Kala Akademi is the government's apex cultural body in the field of visual arts in India. It is an autonomous body, which is fully funded by the Ministry of Culture. The Akademi is an institution that has rendered service to the nation in the arts sphere long before the world woke up to the global impact of Indian art. It has established, preserved and documented a permanent collection that reflects the vitality, complexity and unfolding patterns of modern and contemporary art in India. All through the year it presents exhibitions and educational programmes of unparalleled significance; sustains a library, art collection, archives, conservation laboratory; and supports scholars and publications of pre-eminent intellectual merit all over the country.

Central to the Akademi's mission is the encouragement of a deeper understanding and enjoyment of modern and contemporary art by a diverse local, national and international audience that it serves. The

National Exhibition of Art and the International Triennale - India, are examples of such endeavours.

The Akademi is involved in a wide range of activities promoting Indian art and artists through programmes and strategic partnerships. The Akademi's sincere commitment to the development of art is evident through the strong national and international programmes organised by the headquarters in New Delhi and by the centres situated at Bhubaneshwar, Chennai, Kolkata, Lucknow, Garhi (New Delhi) and sub-centres at Shimla and Patna. Another major art promotional activity of the Akademi is to provide studios to artists who work in various disciplines of art, such as sculpture, graphics, ceramics and paintings. In Delhi, the Akademi administers the Garhi Artists' Studios where approximately 200 artists work regularly.

Website: www.lalitkala.gov.in

Sangeet Natak Akademi

Sangeet Natak Akademi, India's national academy of music, dance and drama, is a pioneer in the creation of modern India. The ephemeral quality of the arts, and the need for their preservation led to the adapting of a democratic system in which the common man had the opportunity to learn, practice and propagate the arts. In 1945, the Asiatic Society of Bengal submitted a proposal for the creation of a National Cultural Trust consisting of three academies—an academy of dance, drama and music; an academy of letters and an academy of art and architecture. It led to the creation of three national academies after Independence. The national academy named Sangeet Natak Akademi, was the first of these entities to be established by a resolution of the Ministry of Education. In 1961, the Sangeet Natak Akademi was reconstituted by the government as a society and registered under the Societies Registration Act, 1860 (as amended in 1957).

The Akademi works towards building up a unified structure of support for the practice of music, dance and drama in India encompassing traditional and modern forms, and urban as well as rural environments. The festivals of music, dance and drama presented or promoted by the Akademi are held all over the country. The great masters of the performing arts have been elected as Fellows of the Akademi. The

Sangeet Natak Akademi Awards conferred annually on eminent artists and scholars are considered the most coveted honours in the field of the performing arts. Thousands of institutions across the country, including many in the remote areas, engaged in teaching or promotion of music, dance and theatre, have received financial assistance for their work from the Akademi, as do researchers, authors and publishers in relevant disciplines.

The Akademi has a large archive of audio and video tapes, 16-mm films, photographs and transparencies and remains the single most important resource for researchers in the field of performing arts of India. The Akademi maintains a reference library consisting of books in English, Hindi and some regional languages. The Akademi's publication unit publishes literature on relevant subjects on a small scale.

The Akademi establishes and looks after institutions and projects of national importance in the field of the performing arts. The Jawaharlal Nehru Manipur Dance Academy (JNMDA) in Imphal, the premier institution in the teaching of Manipuri dance and music, established in 1954, is the first of these institutions. In 1959, the Akademi established the National School of Drama and the Asian Theatre Institute; and in 1964, the Kathak Kendra, both being based in Delhi. The Akademi's other projects of national importance are in Kutiyattam theatre of Kerala, commenced in 1991. Kutiyattam was recognised by UNESCO as a masterpiece of oral and intangible heritage of humanity in 2001. The project on Chhau dance of Odisha, Jharkhand and West Bengal began in 1994. The project support to Sattriya music, dance, theatre and allied arts of Assam was started in 2002.

Being the apex body specialising in the performing arts, the Akademi also advises and assists the Government of India in formulating and implementing policies and programmes in the field of the performing arts. It fosters cultural contacts nationally and internationally. The Akademi has held exhibitions and major festivals in foreign countries to foster cultural contact between India and the world.

Website: www.sangeetnatak.gov.in

National School of Drama

The National School of Drama (NSD)-one of the foremost theatre institutions in the world and the only one of its kind in India - was set up by Sangeet Natak Akademi in 1959. Later, in 1975, it became an autonomous organisation, totally financed by the Department of Culture. The objective of the NSD is to train students in all aspects of theatre, including theatre history, production, scene design, costume design, lighting, make-up, etc. The training course at NSD is of three years' duration. The eligible applicants for admission to the course are screened through two stages. The Diploma of NSD is recognised by the Association of Indian Universities as equivalent to an M.A. Degree for appointment as teachers in colleges/universities and for purposes of registration for Ph.D. The School has a performing wing, a Repertory Company to establish professional theatre and regular experimental work. The NSD has promoted children's theatre as well. It (renamed as Sanskar Rang Toli) was founded in 1989 and has been actively involved in production of plays for children, organising summer theatre workshops in the schools of Delhi and also promoting children's theatre through Saturday Club. Since 1998, the School has organised National Theatre Festival for Children christened 'Jashne Bachpan[1] every year. The first ever National Theatre Festival was held from March 18 to April 14, 1999 to commemorate the 50th year of India's Independence and has been made an annual feature.

A short-term teaching and training programme titled 'Extension Programme' was started in 1978, under which, the school organises workshops in collaboration with the local theatre groups/artists and these programmes are invariably held in the local languages. The workshops could be broadly divided under three categories, production oriented workshops, production oriented children's workshops and teaching and training programmes in theatre. The School has a Regional Research Centre at Bengaluru to cater to the theatrical needs of the four southern states and Puducherry. It also publishes textbooks on theatre and arranges for translation of important books on theatre from English into Hindi.

Website: www.nsd.gov.in

Sahitya Akademi

Sahitya Akademi, India's National Academy of Letters, promotes literature in 24 languages of India recognised by it. It organises programmes, confers awards and fellowships on writers in Indian languages and publishes books throughout the year in 24 recognised languages. Over the past six decades, the Akademi has published over 7,000 books in 24 languages. The Akademi publishes original works and also works in translation -fiction, poetry, drama and criticism - covering classical, medieval, pre-modern and contemporary literature. Sahitya Akademi publishes three journals, *Indian Literature* (bi-monthly in English), *Samkaleena Bhartiya Sahitya* (bi-monthly in Hindi) and *Sanskrit Pratibha* (quarterly in Sanskrit). The Akademi is also involved in promoting quality children's literature. The Akademi's head office is situated in New Delhi with offices in Kolkata, Mumbai, Bengaluru and Chennai.

Akademi Awards are most prestigious literary awards in India. Sahitya Akademi Award [the Award carries the prize money of ₹ 1 lakh and citation], is awarded to the most outstanding book(s) of literary merit published in the 24 Indian languages recognised by the Akademi. Bhasha Samman [the Award carries the prize money of ₹ 1 lakh and citation] is given to writers / scholars / editors collectors / performers/translators who have made considerable contribution to the propagation and enrichment of languages that have not been recognised by the Akademi in addition to stellar contributions to the research into classical and medieval literature of the country; Translation Prize [the Award carries the prize money of ₹ 50,000 and citation] is given to outstanding translations in all the 24 languages recognised by the Akademi; Bal Sahitya Puraskar [the Award carries the prize money of ₹ 50,000 and citation] is given to outstanding contributions to children's literature in 24 languages; and Yuva Puraskar [the Award carries the prize money of ₹ 50,000 and citation] is given to young Indian writers in 24 languages.

The Akademi organises a Festival of Letters every year to celebrate Indian writing. Sahitya Akademi promotes Tribal and Oral Literature in the country through its Centre for Tribal and Oral Literature in Delhi and North-East Centre for Oral Literature in Imphal. The Akademi also confers fellowships on eminent Indian writers and foreign scholars who have served Indian literature.

Monographs on Indian writers (MIL), encyclopaedias, anthologies, archives of Indian literature, national bibliography of Indian literature, encyclopaedia of Indian poetics and histories of Indian literature are some of the major projects undertaken by the Akademi. The Akademi also organises cultural exchange programmes with different countries and sends and receives several writers' delegations every year, besides taking part in literary festivals and book fairs abroad.

Sahitya Akademi Library in New Delhi is one of the very few multilingual libraries which cater solely to literature. With a rich collection of books on literature and literary traditions in 24 recognised Indian languages, this library is one of its kind. In addition to this library, Sahitya Akademi has libraries in its regional offices in Mumbai, Kolkata and Bengaluru. For better dissemination of literature in all the 24 recognised Indian languages, Sahitya Akademi annually participates in about 180 book fairs and exhibitions across the country. Sahitya Akademi bestows Bal Sahitya Puraskar on the best literary works in the field of children's literature and Yuva Puraskar for young writers who have achieved excellence in creative writing and Bhasha Samman for significant contribution to classical and medieval literature and unrecognised languages. It also awards Fellowships and Honorary Fellowships to eminent writers, Indian and non-Indian, and Dr Ananda Coomaraswamy Fellowship and Premchand Fellowship to a person of eminence in the field of art, culture, literature and language studies, and to scholars doing research on Indian literature or to creative writers from the SAARC countries other than India.

Website: www.sahitya-akademi.gov.in

Indira Gandhi National Centre for the Arts

The Indira Gandhi National Centre for the Arts (IGNCA) is a national level academic research centre encompassing the study and experience of all the arts, classical and folk, written and oral, ancient and modern. Located in the heart of New Delhi, IGNCA is an autonomous trust under the Ministry of Culture. It has a rich collection of resources covering a wide range of disciplines, including archaeology, anthropology, history, philosophy, language and literature, arts and crafts of India, south Asia, southeast Asia and west Asia.

The IGNCA has six functional units - Kalanidhi, the multi-form library; Kalakosa, devoted mainly to the study and publication of fundamental texts in Indian languages; Janapada Sampada, the division engaged in lifestyle studies; Kaladarsana; the executive unit which transforms researches and studies emanating from the IGNCA into visible forms through exhibition; Cultural Informatics Lab, which applies technology tools for cultural preservation and propagation; and Sutradhara, the administrative section that acts as a spine for supporting and coordinating all the activities.

The IGNCA has a regional centre at Bengaluru. The regional centre for the eastern region office is located in Varanasi. The centre for North-East is based in Guwahati. IGNCA has also operationalised six new centres across the country in Ranchi, Puducherry, Vadodara, Thrissur, Goa and Srinagar. IGNCA also manages the National Mission of Manuscripts which has conserved and digitised precious heritage of manuscripts, through resource and conservation centres across India.

Website: www.ignca.gov.in

Centre for Cultural Resources and Training

The Centre for Cultural Resources and Training (CCRT) is one of the premier institutions working in the field of linking education with culture. CCRT was set up in 1979 as an autonomous organisation by the Government of India. With its headquarters in New Delhi, it has three regional centres at Udaipur, Hyderabad and Guwahati. The broad objectives of CCRT are revitalising the education system by creating an understanding and awareness among students about the plurality of the regional cultures of India and integrating this knowledge with education. The main thrust is on linking education with culture and making students aware of the importance of culture in all development programmes. It conducts a variety of training programmes for in-service teachers drawn from all parts of the country. The training provides an understanding and appreciation of the philosophy, aesthetics and beauty inherent in Indian art and culture and focuses on formulating methodologies for incorporating a cultural component in curriculum teaching. This training also stresses the role of culture in science and technology, housing, agriculture, sports, etc. It creates awareness amongst students and

teachers of their role in solving environmental pollution problems and conservation and preservation of the natural and cultural heritage.

CCRT organises workshops on drama, music, narrative art forms, etc. Teachers are encouraged to develop programmes in which the art form can be profitably utilised to teach educational curriculum. It organises educational tours to monuments, museums, art galleries, craft centres, zoological parks and gardens; camps on conservation of natural and cultural heritage; camps on learning crafts using low-cost locally available resources; lectures and demonstrations by artists and experts on various art forms; and demonstrations by artists and craft persons in schools. They emphasise on intellectual and aesthetic development of the students.

Over the years, CCRT has been collecting scripts, colour slides, photographs, audio and video recordings and films. Each year, it aims to revive and encourage the art and craft forms of rural India. It also prepares publications, to provide an understanding and appreciation of aspects of Indian art and culture. CCRT implements the Cultural Talent Search Scholarship Scheme, which provides scholarships to outstanding children in the age group of 10 to 14 years, studying either in recognised schools or belonging to families practicing traditional performing or other arts to develop their talent in various cultural fields particularly in rare art forms. The scholarships continue till the age of 20 years or the first year of a University degree. The Scheme for ”Award of Scholarships to Young Artistes (SYA) in Different Cultural Fields” is implemented under which maximum 400 scholarships are provided in the age group of 18 to 25 years in the field of Indian classical music, classical dances, light classical music, theatre, visual arts, folk/ traditional and indigenous arts.

Project Sanskriti is an initiative of the Ministry of Culture in developing/ establishing of interpretation centres in educational institutions in Varanasi. CCRT has also instituted Teachers' Award to selected teachers for their outstanding work in education and culture. The award carries a citation, a plaque and a cash price of ₹ 25,000.

Website: www.ccrtindia.gov.in

Zonal Cultural Centres

Zonal Cultural Centres (ZCCs) aim to arouse awareness of the local culture and to show how these merge into zonal identities and eventually into the rich diversity of India's composite culture. These centres have already established themselves as premier agencies in the field of promotion, preservation and dissemination of culture in the entire country. They promote performing arts by significant contribution in literary and visual arts. The seven Zonal Centres were established under this scheme during 1985-86 at Patiala, Kolkata, Thanjavur, Udaipur, Allahabad, Dimapur and Nagpur. The participation of states in more than one Zonal Cultural Centre according to their cultural linkage is a special feature of the composition of the Zonal Centres. Master craftsmen and artisans from various ZCCs participate in craft fairs. Documentation of various rare folk and tribal art forms is one of the main thrust areas of the ZCCs. Under the National Cultural Exchange Programme (NCEP), exchanges of artists, musicologists, performers and scholars between different regions within the country take place. It has been extremely useful in promoting awareness of different tribal/ folk art forms in different parts of the country. A scheme of theatre rejuvenation provides an opportunity to students, actors, artists, directors and writers to perform on a common platform. Guru Shishya Parampara has been introduced to promote new talents. The ZCCs promote craftsmen through Shilpgrams. The ZCCs identify the different performing/folk art forms in their areas and select one or two talented artists in each of the fields.

Ek Bharat Shreshtha Bharat

Ek Bharat Shreshtha Bharat was announced in 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel. The broad objectives of the initiative are:- (i) to celebrate the unity in diversity of our nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of our country; (ii) to promote the spirit of national integration through a deep and structured engagement between all states and union territories through a year-long planned engagement between states; (iii) to showcase the rich heritage and culture, customs and traditions of either state for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity; (iv) to establish long-term engagements; and

(v) to create an environment which promotes learning between the states by sharing best practices and experiences.

Cultural Heritage of the Himalayas

The aim of Buddhist Tibetan Institutions (BTI) is to help preserve, promote and propagate the intangible elements of Buddhist/Tibetan/Himalayan cultural heritage of the country.

The objective of the scheme is to promote and preserve the cultural heritage of the Himalayas.The scheme was revised in 2011. As per the revised scheme, the grant shall be provided for undertaking these activities: (i) study and research on cultural heritage; (ii) preservation of old manuscripts, literature, art & crafts and documentation of cultural activities/ events like music, dance, etc.; (iii) dissemination through audio-visual programmes of art and culture and (iv) training in traditional and folk art - in the states falling under the Himalayan Region, i.e., Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. The colleges and universities are also eligible to apply. The quantum of funding has been increased from ₹ 5 lakhs to ₹ 10 lakhs per year for an organisation.

Development of Buddhist/ Tibetan Organisation

The objective of the scheme to give financial assistance to the voluntary Buddhist/Tibetan organisations including monasteries engaged in the propagation and scientific development of Buddhist/Tibetan culture and tradition and research in related fields. The scheme was revised in 2011. In the revised scheme, new activities like IT upgradation, transport facilities, construction of classrooms, school buildings and training centres, audio-visual recording/documentation of traditional materials have also been included.

Central Institute of Buddhist Studies

The Central Institute of Buddhist Studies (CIBS), Leh Ladakh formerly known as School of Buddhist Philosophy was established at the behest of late Pandit Jawaharlal Nehru in 1959. The Institute has obtained the status of Deemed University in January 2016.

Nava Nalanda Mahavihara

The Nava Nalanda Mahavihara (NNM) was established in 1951 in Nalanda, Bihar by the Government of Bihar. The NNM is an institution of postgraduate studies and research in Pali and Buddhism. At present, Nava Nalanda Mahavihara is an autonomous institute under the Ministry of Culture and accorded Deemed University status in 2006.

Central University of Tibetan Studies

The Central University of Tibetan Studies, Sarnath, Varanasi was established in 1967 with a view to educating the youths of Tibet and Indian students of Himalayan border areas. The Institute was declared as a ”Deemed to be University” in 1988.

Central Institute of Himalayan Culture Studies

The Central Institute of Himalayan Culture Studies (CIHCS) has been registered as a Society in 2010 under the Societies Registration Act, 1860. The area of operation of the Society shall be all over India. The Institute undertakes undergraduate, postgraduate and doctoral programmes in Buddhist and Himalayan studies and may also establish and maintain feeder schools. Regular grants are also provided to six grantee bodies viz., Library of Tibetan Works and Archives, Dharamshala, Tibet House, New Delhi, Centre for Buddhist Cultural Studies, Tawang Monastery, Arunachal Pradesh, Namgyal Institute of Tibetology, Sikkim, International Buddhist Confederation, GRL Monastic School, Bomdila, Arunachal Pradesh.

Indian Council for Cultural Relations

The Indian Council for Cultural Relations (ICCR) was founded in 1950. Its objectives are: to actively participate in the formulation and implementation of policies and programmes pertaining to India’s external cultural relations; to foster and strengthen cultural relations and mutual understanding between India and other countries; to promote cultural exchanges with other countries and people; and to develop relations with nations. ICCR has been an important tool for promoting cultural diplomacy as part of India’s foreign policy initiatives. Projection of India’s civilisational strengths through initiatives such as ancient Indian literature, Yoga, Ayurveda, Hindi, Indian traditional knowledge system and India’s Buddhist heritage has been one of the major priorities of the Council.

The activities of ICCR, both in India and abroad, are mainly divided into two segments—academic, and visual and performing arts. In the academic field, ICCR has been establishing Chairs of Indian Studies covering various subjects; conferring international awards to foreign scholars; organising conferences on various themes related to India; scholarships to foreign nationals, especially helping those countries that need India's assistance in capacity-building and human capital development, to pursue courses in varied fields and performing and fine arts. The cultural flow is a two-way process. While Indian artistes are sponsored to visit abroad to showcase Indian culture in its entirety, ICCR has been organising cultural events, such as the annual Ramayana Festival, Sufi Festival, International Folk Festival and International Jazz Festival featuring performances by foreign artistes in India; exchange of performing art groups; and art exhibitions and residencies with various countries of the world. Its global network of 38 cultural centres and Indian Missions abroad play a significant role in carrying out its activities. ICCR actively collaborates with state governments, universities/ institutions and socio-cultural organisations for its activities in India.

In a first-of-its kind, the Council successfully organised a conference on Destination India to promote India as a global hub of education during 2019.

Archaeological Survey of India

The Archaeological Survey of India (ASI) was established in 1861. It functions as an attached office of the Ministry of Culture. The major activities of the Archaeological Survey of India are: survey of archaeological remains and excavations; maintenance and conservation of centrally protected monuments, sites and remains; chemical preservation of monuments and antiquarian remains; architectural survey of monuments; development of epigraphical research and numismatic studies; setting up and re-organisation of site museums; expeditions abroad; training in archaeology; and publication of technical reports and research works. There are 29 circles, 3 mini circles and five regional directorates through which the Archaeological Survey of India

administers the work of preservation and conservation of monuments under its protection.

Under the Ancient Monuments and Archaeological Sites and Remains Act, 1958, the ASI has declared 3,691 monuments/sites to be of national importance in the country which includes 22 properties that are inscribed on the World Heritage List by the UNESCO. These sites, include Champaner-Pavagarh Archaeological Park in Gujarat, Chhatarpati Shivaji Terminus in Mumbai and the Great Living Chola Temples (Brihadisvara temple at Gangaikondacholapuram and the Airavatesvara temple complex). Nomination dossiers for the Victorian and Art Deco Ensemble of Mumbai have been sent to the World Heritage Centre for inscription on the World Heritage List of UNESCO. The total number of individual structures being maintained by the ASI is over 5,000. Search, study and preservation of cultural heritage lying submerged in inland or territorial waters are among the principal functions of the Underwater Archaeology Wing. It carries out exploration and excavation in Arabian Sea as well as in Bay of Bengal. The Science Branch of the Survey with its headquarters at Dehradun and field laboratories in different parts of the country carries out chemical preservation of monuments, antiquities, manuscripts, paintings, etc.

The Horticulture Branch of the ASI maintains gardens in about 287 centrally protected monuments/sites located in different parts of the country. The Branch provides periodic plants to be used in gardens by developing base nurseries at Delhi, Agra, Srirangapatnam and Bhubaneshwar. The Epigraphy Branch at Mysore carries out research work in Sanskrit and Dravidian languages while the one at Nagpur carries out research work in Arabic and Persian.

Website: www.asi.nic.in

National Mission on Monuments and Antiquities

The National Mission on Monuments and Antiquities (NMMA) was launched in 2007 with the objective to prepare a National Database on Built Heritage and Sites (BH&S) and antiquities from different sources and museums during the Xlth Five Year Plan for information and dissemination to planners, researchers etc., and better management of such cultural resources. Keeping in view the magnitude of the work

involved, and as per recommendations of National Productivity Council in its 3rd Party Evaluation Report, NMMA has been made a Division of Archaeological Survey of India.

As part of the mandate, NMMA has to prepare two national registers viz., (i) National Register on Built Heritage and Sites; and (ii) National Register on Antiquities. About 2.00 lakh data on Built Heritages and Sites has been documented from various secondary sources. NMMA has documented data of approximately 15.00 lakh antiquities so far from different sources.

National Mission for Manuscripts

The National Mission for Manuscripts (NMM) was launched in 2003 with the Indira Gandhi National Centre for the Arts (IGNCA) as the nodal agency to reclaim India's inheritance of knowledge contained in the vast treasure of manuscripts. There are Manuscripts Resource Centres (MRC), Manuscripts Conservation Centres (MCC), Manuscripts Partner Centres (MPC) and Manuscripts Conservation Partner Centres (MCPC) all over India to locate, document, conserve and digitise the tangible heritage of India.

Major activities of NMM are: documentation of manuscripts through survey; conservation of manuscripts through preventive and curative methods; training courses and workshops on conservation methods, manuscriptology and paleography workshops for teaching ancient scripts; digitisation of manuscripts for archival and easy access to the knowledge-base; dissemination of knowledge contained in the manuscripts through publications; and outreach programme to create public awareness of the importance of manuscripts.

National Museum

The National Museum, under the Ministry of Culture is one of the premiere cultural institutions of the country. It has an interesting beginning. The blueprint for establishing the National Museum was prepared by the Maurice Gwyer Committee in May 1946. An Exhibition of Indian Art, consisting of selected artifacts from various museums of India was organised by the Royal Academy, London with the cooperation of Government of India and Britain. The Exhibition went on display in

the galleries of Burlington House, London during the winter months of 1947-48. It was decided to display the same collection in Delhi, before the return of exhibits to their respective museums. An exhibition was organised in the Rashtrapati Bhawan (President's residence), New Delhi in 1949, which turned out to be a great success. This event resulted in the creation of the National Museum.

The Museum was inaugurated on December 18, 1960. The National Museum has in its possession over 2,00,000 antiquities and art objects, both of Indian and foreign origins covering more than 5,000 years of our cultural heritage. The rich and rare collection includes artifacts from the sites of Harappan Civilisation such as pottery, seals, tablets, weights and measures, jewellery, terracotta figurines, toys, tools, etc. The Museum has in its possession the rich heritage of Indian miniature paintings, Central Asian arts collection, coins, Pre-Columbian and Western Art collections, musical instruments, Indian arms, and armour, etc. An important attraction of the museum is the gallery on Buddhism: A spiritual journey, with the focus on the sacred relics of the Buddha (5th-4th century B.C.). During the year 2019, about 2,97,709 visitors came to the National Museum as per sale of entry tickets!

The main activities of the museum include organisation of exhibitions in India and abroad, re-organisation/modernisation of galleries, educational activities and outreach programmes; public relations; publications; photo documentation; memorial lectures; museum corner; photo unit; modeling unit; library; conservation laborotary; certificate/short-term courses; and workshops.

Website: www.nationalmuseumindia.gov.in .

National Gallery of Modern Art

The National Gallery of Modern Art (NGMA), New Delhi, was founded in 1954 to promote and develop contemporary Indian art. It houses 17,858 works of art, representing about 1,748 contemporary Indian artists. The collection has been built up mainly by purchase and also by gift. The NGMA's important collections include paintings, sculptures, graphic arts and photographs. It organises exhibitions from its collection and under cultural exchange programme periodically. Several colour reproductions have been brought out. The objective of NGMA is

to help people look at the works of modern art with understanding and sensitivity.

Website: www.ngmaindia.gov.in

Indian Museum

The history and highlights of the Indian Museum is that it is the eighth oldest museum in the world which houses almost 1.10 lakhs of artefacts telling the oriental history and the heritage of India.

The history of the origin and the growth of the Indian Museum is one of the remarkable events towards the development of heritage and culture of India. Sir William Jones as one of the profoundest scholars devoted his life to the service of India founded Asiatic Society in 1784. Dr. Nathanial Wallich, a Danish Botanist, wrote a letter to the Asiatic Society in which he strongly advocated the formation of a Museum at the premises of the Society. Thus a museum, under the guidance of Dr. Nathanial Wallich was established in 1814 at the cradle of the Asiatic Society. The museum was known in the beginning as the ”Asiatic Society Museum” subsequently came to be known as the ”Imperial Museum” and later familiarised as the ”Indian Museum”, which is more popular by the name ”Jadughar” among the visitors. The present building of the Indian Museum was completed in 1875. Though in the beginning Indian Museum was opened with two galleries, later on it was transformed into a multi-purpose institution where multi-disciplinary objects have been displayed in its six sections viz., art, archaeology, anthropology, zoology, geology and botany. The Museum which was founded on 1814 at the cradle of the Asiatic Society thus grew into the largest institution of its kind of the country portraying the legacy and pride of the nation. Since 1878, at its present edifice, the Indian Museum has been rendering its services to the people of India as an epitome of art and culture of India and is also being highlighted as one of the pioneering national institutions in the Constitution of the Republic of India.

The Indian Museum plays a significant role not only in preserving the artefacts of the Indian heritage but also acts as a catalyst as an interpretation centre of Indian art heritage to facilitate the audience as a learning centre through its multicultural activities, which is needed to properly highlight for augmenting more and more tourists to the region.

National Council of Science Museums

National Council of Science Museums (NCSM), an autonomous body under the Ministry of Culture, is the largest network of science centres/museums in the world functioning under a single administrative control. It is primarily engaged in spreading the culture of science in the society especially among students with a motto of 'Communicating Science to Empower People' through its network of Science Centres spread across India. NCSM is the implementing agency for the Science City Scheme for developing new science centres in the country of national, regional and district level. NCSM has its own network of 25 Science Museums/ Centres and has also developed and handed over 24 science centres to various state/UT governments. NCSM also provides catalytic support to other organisations by way of developing interactive exhibits and exhibitions using state-of-the-art display technologies and techniques. Through its two-pronged activity - one : development of science centres/museums, exhibits, gallery, exhibitions, innovation hub etc.; and the other by organising various interactive science programmes and out of school activities - NCSM provides non-formal support to the science education in the schools.

The concept of 'Museum on Wheels' was introduced in India in 1965 when Mobile Science Exhibition (MSE) programme started a Mobile Science Museum (MSM) at Ramakrishna Mission School, Kolkata. Today, a fleet of 23 MSE buses, attached to different science centres of NCSM, travel through the parts of rural India and take the message of science and technology to the rural populace. Apart from the exhibition on themes of local relevance the MSE programmes include science shows, hands-on workshop for students, night sky observation through telescope, science film shows etc., as value addition. This is one of the most successful programmes of NCSM and more than 65 million people, mostly students, have benefited from it so far. Last year, this programme has been added in Limca Book of Records for largest and longest running Informal Science Education Programme in India.

NCSM also facilitates participation of Indian students in International Astronomy Olympiad (Junior category) every year by organising an Orientation Cum Selection Camp and Pre-Departure Training for selected students. NCSM is also implementing the scheme for setting up of

Innovation Hubs in the Science Centres/Institutions to inculcate a culture of innovation, creativity and engagement in science amongst the youth of the country. NCSM has also conceptualised, developed and sent travel ling exhibitions to more than 15 countries namely USA, Russia, France, Bulgaria, Nepal, China, Bangladesh, Trinidad & Tobago, Guyana, Bhutan, Indonesia, Malaysia, South Africa, Sri Lanka, Mauritius, Australia and UK. Details are available on its website.

Website: www.ncsm.gov.in

Victoria Memorial Hall

The Victoria Memorial Hall (VMH), Kolkata was founded principally through the efforts of Viceroy Lord Curzon, in 1921 as a period museum in the memory of Queen Victoria with particular emphasis on Indo-British history. The VMH was declared an institution of national importance by the Government of India Act of 1935.

It is the premier period museum in India on Indo-British history in the eighteenth, nineteenth and twentieth centuries. It also functions as the premier art gallery, museum, research library, and cultural space in Kolkata. It has been widely hailed as the finest specimen of Indo-British architecture in India, and called the 'Taj of the Raj'. In 2017, the VMH has been recognised by TripAdvisor-the world's largest travel and tourism-related website - as the no. 1 museum in India and the no. 9 museum in Asia. Its rapidly rising global stature as a top tourist destination in India is also indicated by the award of Lonely Planet 'Top Choice[1] and 'Fodor's Choice' ratings. The VMH is currently by far the most-visited museum in India and one of the top museums in the world in terms of footfall. In 2015, it was also named as the 'Cleanest Monument in India', for which it bagged th`e India Today Safaigiri Award.

As a museum, the VMH collection has 28,394 artefacts displayed in nine galleries that encapsulate the history of the country extending over three centuries beginning from 1650 A.D. The collection includes paintings in oil and watercolour, sketches and drawings, aquatints, lithographs, photographs, rare books and manuscripts, stamps and postal stationery, coins and medals, arms and armour, sculptures, costumes, personal relics and other miscellaneous archival documents.

Website: www.victoriamemorial-cal.org

National Museum Institute of History of Art, Conservation and Museology

It is an autonomous organisation, fully funded by the Ministry of Culture, established and declared as a Deemed University in 1989. This is the only Museum University in India and is presently functioning at the first floor of National Museum, New Delhi. The Director General, National Museum is the ex-officio Vice-Chancellor of this university. Main objectives are: (a) to provide education and training in the specialised areas of art, history, conservation and museology leading to the award of M.A. and Ph.D. degrees in these three disciplines; (b) a few short-term courses—Indian art and culture, art appreciation in Hindi Medium are also conducted to popularise the Indian culture; and (c) to organise seminars/ workshops, conferences and special lectures on museum education, art and culture.

National Research Laboratory for Conservation of Cultural Property

National Research Laboratory for Conservation of Cultural Property (NRLC) was established in 1976, as a subordinate office of the Department of Culture and is recognised by the Department of Science and Technology as a scientific institution of the Government of India. It provides conservation services and technical advice in matters concerning conservation to museums, archives, archaeology departments and other related cultural institutions, imparts training in different aspects of conservation, carries out research in methods and manner of conservation, dissemination of knowledge in conservation and provides services to conservation professional of the country. NRLC with its headquarters at Lucknow, has full-fledged training institute campus at Jankipuram, Lucknow and a regional centre - Regional Conservation Laboratory at Mysuru set up for catering to conservation needs of South India.

Ramakrishna Mission Institute of Culture

The Institute was conceived in 1936 as one of the permanent memorials to Sri Ramakrishna (1836-86) on the occasion of his first birth centenary. It was formally established in 1938 as a branch centre of the Ramakrishna Mission founded by Swami Vivekananda to propagate the message of Vedanta as propounded by Sri Ramakrishna, whose basic teachings stressed: (i) the equality of all religions; (ii) the potential

divinity of man; and (iii) service to man is a way of worshipping God - a new religion for mankind.

Anthropological Survey of India

The Anthropological Survey of India (An.S.I.) as an institution is one of its kind anywhere in the world. It has been mandated to study the bio-cultural attributes of the Indian populations since its establishment. Over the decades, the An.S.I. grew from strength to strength to acquire an unparalleled blend of holistic perspective to study the human surface of the country. The activities include collection, preservation, maintenance, documentation and study of ethnographic materials as well as ancient human skeletal remains. Of late, the Anthropological Survey of India went about an all-round modernisation of its infrastructure to usher in the DNA technology to study the phylogenies of Indian populations, the anthropological genetics of diseases and the frontier areas of Anthropology. Over the years, the Survey has generated information from grass-root level through sustained research by its head office, Kolkata, seven regional centres (Port Blair, Shillong, Nagpur, Mysuru, Dehradun, Udaipur, Kolkata), one sub-regional centre Magadalpur), three field stations at Sagar, Ranchi, Visakhapatnam and camp office (New Delhi).

The Survey has published various books, monographs, research reports and other occasional publications. It also publishes its quarterly newsletter and biannual house journal. The survey organises various conferences, seminars, workshops and exhibitions in collaboration with universities and other academic institutions of the country.

Website: www.ansi.gov.in

National Archives of India

The National Archives of India is the custodian of the non-current records of the Government of India and is holding them in trust for the use of the record creators and the users at large. It is the biggest repository of the non-current records in South-East Asia. Archives are the priceless documentary heritage of any nation and as the premier archival institution in the country, the National Archives of India (NAI) plays a key role in guiding and shaping the development of archives both at the national as well as international level. In its unique position as the sole repository of the union government for public records of the country,

National Archives of India functions as an attached office of the Ministry of Culture that is entrusted with the preservation of the documentary heritage of the nation. It is also the nodal agency for the implementation of the Public Records Act, 1993 and public records. It has one regional office at Bhopal and three records' centres at Bhubaneswar, Jaipur and Puducherry.

The major activities of the National Archives of India include: making public records accessible to various government agencies and research scholars; an online search portal "www. abhilekh-patal.in" now facilitates to access records; rendering technical assistance to individuals and institutions in the field of conservation of records; the Department through its regular diploma courses being conducted by the School of Archival Studies imparts training in various disciplines of archival sciences. The National Archives of India provides financial assistance to states/union territories, archives, voluntary organisations and other custodial institutions for enhancing documentary heritage of the nation.

E-mail: archives@nic.in

Website: www.nationalarchives.nic.in

Libraries

National Library

The National Library, Kolkata, was originally known as the Imperial Library and was founded in 1891. After independence, the name of the library was changed to National Library. It enjoys the status of an institution of national importance, its functions are: (i) acquisition and conservation of all significant printed material (to the exclusion only of ephemera) as well as of manuscripts of national importance; (ii) collection of printed material concerning the country, no matter where this is published; (iii) rendering of bibliographical and documentary services of current and retrospective material, both general and specialised; (iv) acting as referral centre surveying full and accurate knowledge of all sources of bibliographical information and participation in international bibliographical activities; and (v) acting as a centre for international book exchange and internal loan.

Website: www.nationallibrary.gov.in

Central Secretariat Library

The Central Secretariat Library (CSL) originally known as Imperial Secretariat Library, Kolkata, was established in 1891. Since 1969, the library has been housed at Shastri Bhawan, New Delhi, with a collection of over seven lakh documents mainly on social sciences and humanities. It is a depository of Indian official documents, central government and state government documents. The col lection of Area Studies Division is unique, in which books have been arranged according to geographical area. It has an extremely rich rare book collection with a large biographic collection.

It provides all possible readers' services to central government officials and other research scholars visiting the library from all over India. In the recent past, the CSL has digitised the Government of India gazette, committee and commission reports and has also developed the Online Public Access Catalogue (OPAC) system for its collection.

The library has two branches, namely, Hindi and regional languages wing popularly known as Tulsi Sadan Library, Bahawalpur House, New Delhi that houses about 1.9 lakh volumes of Hindi and 13 other constitutionally approved Indian regional language books and a text-book library located at R.K. Puram, New Delhi which caters to the need of the wards of central government employees of undergraduate level.

Website: www.csl.nic.in

Other important libraries include: Raja Rammohan Roy Library Foundation, Delhi Public Library, Rampur Raza Library and Khuda Baksh Oriental Public Library.

Nehru Memorial Museum and Library

The Nehru Memorial Museum and Library comprises a museum on the life and times of Jawaharlal Nehru; the research and publication division; a library that has a pre-eminent position among the social science libraries in the country; the oral history division; the manuscripts division; the centre for contemporary studies; the planetarium; and the Nehru learning centre for children and youth. The Archive is the biggest collections of private papers of individuals and institutions, especially from the freedom struggle. This vast repository of India's modern and

contemporary history is used by scholars and academics from all over the world extensively for their research work.

The centre for contemporary studies runs a Fellowship programme (thirty-two Fellows), which is highly regarded in the academic world and it also regularly conducts academic activities such as lectures, conferences, book discussions, panel discussions, conferences/workshops, etc.

The publications division brings out the works of pre-eminent persons from the social sciences, proceeds of conferences, seminars, and also publishes a research series called occasional papers.

The planetarium, the only one in Delhi region, is visited by thousands including school children, college students, teachers, and general public for firsthand knowledge on astronomy and space technology.

Website: www.nehrumemorial.nic.in

National Mission on Libraries

National Mission on Libraries has been set up by Ministry of Culture, in 2012 in pursuance of National Knowledge Commission recommendations for sustained attention for development of libraries and information science sector.

Its components are: creation of National Virtual Library of India; setting up of NML model libraries; quantitative and qualitative survey of libraries; and capacity building. The purpose of National Virtual Library of India is to facilitate a comprehensive database on digital resources on information about India and on information generated in India, in an open access environment.

Performing Arts

The Ministry of Culture administers the following schemes:

Performing Arts Grants Scheme

This is the flagship scheme of the Ministry in the field of Performing Arts. Under this scheme, financial assistance is provided to dramatic groups, theatre groups, music ensembles, children's theatre and for all genres of performing arts activities. Under the Repertory Grant, financial assistance in favour of a maximum of 1 Guru/Director and 25 Shisyas/Artistes may be provided to a cultural organisation for a

complete financial year. The existing rate of financial assistance to each Guru/Director is ₹10,000 per month.

Scheme for Cultural Organisations with National Presence

To promote and support cultural organisations with national presence involved in promotion of art and culture throughout the country, this grant is given to such organisations that have a properly constituted managing body, registered in India; having a pan-India character with national presence in its operation; adequate working strength; and have spent ₹ 1 crore or more during 3 of the last 5 years on cultural activities. The quantum of grant under this scheme is ₹ 1 crore to 5 crore. The grant is payable in two installments, i.e., 75 per cent and 25 per cent of the approved amount. The complete details regarding the scheme are available on the website of Ministry of Culture: www.indiaculture.nic.in/scheme-financial-assistance-cultural-organisations- national-presence.

Scheme of Building Grants

The objective of the scheme is to support voluntary cultural organisations and government-aided cultural organisations to augment their efforts to create cultural space, viz., auditorium, appropriately equipped training, rehearsal and performance spaces for artistes etc. and also for the purchase of equipment. Studio theatre is also a component under which small, innovative spaces for theatre and other performing arts could be created with 60 per cent government assistance (going up to ₹ 50 lakhs in metro cities and ₹ 25 lakhs in other places). The complete details regarding the scheme are available on the website of the Ministry: www.indiaculture.nic.in/scheme-building-grants-including-studio-theatres .

Tagore Cultural Complexes Scheme

Tagore Cultural Complexes (TCC) is a revived and revamped version of the erstwhile Multi Purpose Cultural Complexes Scheme. It was renamed on the 150th birth anniversary of Rabindranath Tagore. Under this scheme, financial assistance is provided for the setting up of new cultural complexes of varying scales as also for modernisation, renovation and upgradation of existing Tagore auditoria etc., that were built in 1960s and 1970s in various parts of the country to mark Tagore's

birth centenary. The scheme is open to state governments, state sponsored bodies, universities, local bodies and other government approved agencies including reputed not-for-profit organisations, etc. The complete details regarding the scheme are available on the website of the Ministry: www.indiaculture.nic.in/scheme- tagore-cultural-complexes.

Scheme of Pension to Artistes

Under this scheme, financial assistance is granted to indigent artistes and traditional scholars who have made significant contribution to art and letters and in their fields, etc., and their income (including income of the spouse) must not exceed ₹ 4,000/- per month and also their age should not be less than 60 years (this does not apply in the case of dependents). Artistes covered under it are considered for financial assistance in the form of monthly allowance under the centre-state quota on sharing basis between centre and state government/UT administration concerned, with the latter paying a monthly allowance of at least ₹ 500/- per month per beneficiary. The monthly allowance contributed by the central government in such cases shall not exceed ₹ 3,500/- per month per beneficiary. The complete details regarding the scheme are available on www.indiaculture.nic.in/artists-pension-scheme-and-welfare-fund .

Fellowship and Scholarship Scheme

(i) Scheme For The Award of Fellowship to Outstanding Persons in the Field of Culture

Junior/Senior Fellowships are awarded to outstanding persons in the age group of 25 to 40 years **Or.)** and above 40 years (Sr.) in different cultural fields, for undertaking cultural research; Junior Fellows and Senior Fellows are granted fellowship @ ₹ 10,000/- p.m. and 20,000/- p.m. respectively for a period of 2 years; online applications are invited and selection is made by an expert committee constituted for this purpose; and up to 400 fellowships (200 Junior and 200 Senior) are awarded in a batch year.

(ii) Scheme for Scholarships to Young Artistes in Different Cultural Fields

Under this scheme, financial assistance is given to young artistes of outstanding promise in the age group of 18-25 years for advanced training within India in the field of Indian classical music, Indian

classical dance, theatre, mime, visual art, folk, traditional and indigenous arts and light classical music, etc. Scholars who are selected are given scholarship @ ₹ 5,000/- p.m. for 2 years. Online applications are invited and selection is made by an expert committee constituted for this purpose. Upto 400 scholarships are awarded in a batch year.

Production Grant Scheme

The scheme covers all 'not-for-profit' organisations, NGOs, societies, trusts, universities and individuals for supporting the seminars, conferences, research, workshops, festivals, exhibitions, symposia, production of dance, drama-theatre, music etc., and small research projects on different aspects of Indian culture. The organisation should have been functioning and registered under the Societies Registration Act (XXI of 1860), Trusts Act, Companies Act or any central or state Act for at least three years; for individuals applying for financial assistance under the scheme there is no such requirement. Grant is given upto ₹ 5 lakhs under the scheme.

Tagore National Fellowship Scheme

The scheme was introduced in order to invigorate and revitalise the various institutions under the ministry and other identified cultural institutions in the country, by encouraging scholars/academicians to affiliate themselves with these institutions to work on projects of mutual interest. With a view to infuse fresh knowledge capital into the institutions, the scheme expects these scholars/ academicians to select specific resources of the institutions to take up projects and research work that are related to the main objectives of these institutions and to enrich them with a new creative edge and academic excellence. It is open to both Indian nationals and foreign citizens. The proportion of foreigners will not normally exceed one-third of the total fellowships awarded in a year. Tagore Fellows are paid an honorarium ₹ 80,000/- p.m. plus contingencies and Tagore Scholars are paid ₹ 50,000/- p.m. as honorarium plus contingencies.

Gandhi Heritage Sites Mission

In April 2006, Government of India constituted a Gandhi Heritage Sites Panel with eminent Gandhians. Based on the recommendation of

the Panel, the Gandhi Heritage Sites Mission with a fixed term of 5 years was created in 2013 with a total budget outlay of ₹ 42 crores.

The Mission's mandate is to preserve for posterity the 39 core sites as well as some important sites from the master list (consisting of 2,000 sites visited by Mahtama Gandhi) and to supervise, guide and assist in conservation initiatives, maintenance or preservation initiatives and the creation of a database of tangible, literary and visual heritage associated with Gandhiji.

Gandhi Smriti and Darshan Samiti

Gandhi Smriti and Darshan Samiti was formed in 1984 by the merger of Gandhi Darshan at Rajghat and Gandhi Smriti as an autonomous body and is functioning under the financial support from the Ministry of Culture. The Prime Minister of India is its Chairperson and it has a nominated body of senior Gandhians and representatives of various government departments to guide it in its activities. The basic aim and objective of the Samiti is to propagate the life, mission and thought of Mahatma Gandhi through various socio-educational and cultural programmes. It has two campuses.

Gandhi Smriti is the place where Mahatma Gandhi lived the last 144 days of his life, and where the epic life of Gandhiji ended on January 30, 1948. The Martyrs Column, the spot where the Mahatma fell to an assassin's bullets stands as the embodiment of all the sufferings and sacrifices that characterised the long struggle of India's Freedom. Photographs, sculptures, paintings, frescos, inscriptions on rocks and relics, exhibitions etc., pertaining to the years Gandhiji stayed there are displayed here. The meagre personal effects of Gandhiji are also carefully preserved. Gandhi Darshan, the second campus, is situated adjacent to the Mahatma Gandhi Samadhi at Rajghat. The sprawling 36 acre campus came into existence in 1969 to mark the centenary of Mahatma Gandhi. An International Gandhi Darshan Exhibition was housed to commemorate the occasion. At present the Centre provides a comprehensive exhibition on Gandhi, conference halls, camping facilities for major national and international meets, a library, hostel for scholars-in-residence, children's corner, photo unit and a publications division.

Tourism

Ministry of Tourism is the nodal agency to formulate national policies and programmes for the development and promotion of tourism. In the process, the Ministry consults and collaborates with other stakeholders in the sector including various central ministries/ agencies, the state governments/ union territory administrations and the representatives of the private sector. Tourism is a major engine of economic growth and an important source of foreign exchange earnings in many countries including India. It has great capacity to create large scale employment of diverse kind - from the most specialized to the unskilled and hence can play a major role in creation of additional employment opportunities. It can also play an important role in achieving growth with equity. The Ministry of Tourism has the main objective of increasing and facilitating tourism in India. Augmenting tourism infrastructure, easing of visa regime, assurance of quality standards in services of tourism service providers, etc., are some of the responsibilities of the Ministry.

The Ministry is according priority for holistic development of tourism destinations into world-class destinations using a cluster approach including development of infrastructure, amenities, interpretation centres and skill development by achieving synergy and convergence with other central ministries, state governments and industry stakeholders. As a step in this direction, it has recently launched the 'Adopt A Heritage' project. Heritage sites are being offered for adoption by the public sector, private sector and individuals to become 'Monument Mitras' for developing amenities and facilities at these sites under this programme.

Website: www.tourism.gov.in

Foreign Tourist Arrivals

Foreign Tourist Arivals (FTAs) during 2019 were 10.89 million (prov.) with a growth of 3.2 per cent over the same period of the previous year.

Special Tourism Zones

Creation of 'Special Tourism Zones' anchored on Special Purpose Vehicles (SPVs) is in partnership with the states. Ministry of Tourism has formulated the guidelines for implementation of the new scheme in consultation with the state governments and private sector and is in the process of completing other formalities before launching the scheme.

Foreign Exchange Earnings

Foreign Exchange Earnings through Tourism (FEEs) during 2019 was ₹ 2,10,981 crore with a growth of 8.3 per cent over the same period of previous year.

e-Visa Facility

Facilitative visa regime is a pre-requisite for increasing in-bound tourism. The Ministry of Tourism takes the initiative of pursuance with Ministry of Home Affairs and Ministry of External Affairs for achieving the same. As in December 2019, e-visa facility was extended to the nationals of 169 countries under subcategories, i.e.,'e-Tourist visa', 'e-Business visa', 'e-Medical visa', 'e-Medical Attendant visa' and 'e-Conference visa'. The latest country added is Kingdom of Saudi Arabia. A new category of e-Tourist visa for 5 years with multiple entry in addition to the existing e-Tourist visa for one year and a new category of e-Tourist visa valid for one month with double entry has been introduced. The visa fee has been rationalized and has been fairly reduced wherein e-Tourists visa fee reduced to USD 80 for 5 years, USD 40 for 1 year and one-month e-Tourist visa fee reduced to USD 10 for lean season and USD 25 for peak season. During 2019, a total of 2.93 million tourists arrived on e-Tourist visa registering a growth of 23.6 per cent.

24x7 Toll Free Multi-lingual Tourist Help Line

For providing information relating to travel and tourism to the domestic and international tourists/visitors and for assisting them with advice while travelling in India, a 24x7 toll free multi-lingual tourist help line in 10 international languages besides Hindi and English is being run by the Ministry of Tourism. The calls made by tourists (both international and domestic) while in India will be free of charge. This service will be available on the number 1800111363 or on a short code 1363. The international languages handled are Arabic, French, German, Italian, Japanese, Korean, Chinese, Portuguese, Russian and Spanish, in addition to English and Hindi.

Niche Products

Welcome cards for distribution at immigration counters to people arriving in India were introduced with few guidelines on how to make their stay more safe and comfortable. The aspect of 'seasonality' in tourism is a challenge. The Ministry of Tourism has taken the initiative of identifying, diversifying, developing and promoting niche products of

the country. This is done in order to overcome seasonality and to promote India as a 365 days destination, attract tourists with specific interest, and to ensure repeat visits for the unique products in which India has a comparative advantage. The niche products that have been identified by the Ministry include cruise, adventure, medical, wellness, golf, polo, meetings, incentives, conferences and expositions (MICE), ecotourism, film tourism and sustainable tourism.

National Medical and Wellness Tourism Board

A National Medical and Wellness Tourism Board has been set up to work as an umbrella organisation to govern and promote medical tourism in India.

Task Force on Adventure Tourism

For development and promotion of adventure tourism, a task force on Adventure Tourism was formed in 2016 to resolve the issues related to adventure tourism which includes safety and security of tourists.

Hospitality Education

Setting in place the framework for supply of trained manpower is a challenge facing hospitality education. It has been the endeavour of the Ministry to put in place a system of training and professional education with necessary infrastructure support that is capable of generating manpower, which is sufficient to meet the needs of the tourism and hospitality industry—both quantitatively and qualitatively. As of now, there are 42 Institutes of Hotel Management (IHMs), comprising 21 Central IHMs and 21 State IHMs and 10 Food Craft Institutes (FCIs), which have come up with the support of the Ministry. These institutes were set up as autonomous societies with the specific mandate to impart hospitality education / conduct training in hospitality skills. While the IHMs mainly impart degree level hospitality education, the FCIs are concerned with skill level education. National Council for Hotel Management & Catering Technology (NCHMCT) steers and regulates the academic efforts of the IHMs and FCIs.

Indian Institute of Tourism and Travel Management

The Indian Institute of Tourism and Travel Management (IITTM) is an autonomous body under the Ministry with its headquarters at Gwalior. Its centres are at Bhubaneshwar, Nellore, Noida and Goa. IITTM is a

pioneer in the field of travel and tourism education and training. It provides specialised training and education for tourism and travel industry.

Indian Culinary Institute

The Ministry of Tourism has set up the Indian Culinary Institute (ICI) at Tirupati, Andhra Pradesh. The first of its kind in India, the Institute has commenced its academic session from August 2016. The Ministry is also expanding the ICI by opening its northern chapter at Noida.

Incredible India

The Ministry, as part of its ongoing promotional activities, releases campaigns in the international and domestic markets under the 'Incredible India' brandline, to promote various tourism destinations and products of India for increasing foreign tourist arrivals and domestic travel within the country. A series of promotional activities are undertaken in important and potential markets overseas through the India Tourism offices abroad and within India through domestic India Tourism offices, with the objective of showcasing India's tourism potential to foreign and domestic tourists.

International Advertisement Campaign

To promote tourism, the government has also taken many initiatives. An International Advertisement Campaign in electronic and digital media for 2016-17 was launched globally. To begin with, the Ministry has launched its campaign on leading television channels including CNN, BBC, Discovery and TLC , Euro News, History, CNBC, Travel Channel, CBS (USA), Tabi (Japan) and RMC (France) as well as on Google.

The Ministry of Tourism organises *Bharat Parv* as part of the Republic Day and Independence Day celebrations with the objective to promote national integrity and to showcase cultural and culinary diversity to the people of our nation.

North-East

The North-East region of India is being promoted by the Ministry through several media campaigns. The Ministry in partnership with the Discovery Channel has produced documentary series 'Go North East' on the eight states of the region. For creation of tourism infrastructure, the Ministry of Tourism has two major plan schemes, viz., Swadesh Darshan

- Integrated Development of Theme-Based Tourist Circuits and PRASAD - Pilgrimage Rejuvenation and Spiritual Augmentation Drive for development of tourism infrastructure in the country including historical places and heritage cities.

Swadesh Darshan Scheme

Swadesh Darshan Scheme is about developing theme-based tourist circuits on the principles of high tourist value, competitiveness and sustainability in an integrated manner by synergising efforts to focus on needs and concerns of all stakeholders to enrich tourist experience and enhance employment opportunities. Under it 13 thematic circuits have been identified for development, namely: North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit.

PRASAD Scheme

Under PRASAD scheme, 25 sites of religious significance have been identified for development namely Amaravati (Andhra Pradesh), Amritsar (Punjab), Ajmer (Rajasthan), Ayodhya (Uttar Pradesh), Badrinath (Uttarakhand), Dwarka (Gujarat), Deoghar (Jharkhand), Belur (West Bengal), Gaya (Bihar), Guruvayoor (Kerala), Hazratbal (Jammu & Kashmir), Kamakhya (Assam), Kanchipuram (Tamil Nadu), Katra (Jammu & Kashmir), Kedarnath (Uttarakhand), Mathura (Uttar Pradesh), Patna (Bihar), Puri (Odisha), Srisailam (Andhra Pradesh), Somnath (Gujarat), Tirupati (Andhra Pradesh), Trimbakeshwar (Maharashtra), Ujjain (Madhya Pradesh), Varanasi (Uttar Pradesh) and Vellankani (Tamil Nadu).

Incredible India Mobile App

Incredible India Mobile App was launched to showcase India as a holistic destination, revolving around major experiences, such as spirituality, heritage, adventure, culture, yoga, wellness and more. The mobile app has been designed keeping in mind the preferences of the modern traveller and follows the trends and technologies of international standards. The app has been equipped with features to assist the traveller in each phase of their journey to India.

India Tourism Mart

The first editon of the India Tourism Mart 2018 was organised by the Federation of Associations in the Indian Tourism and Hospitality with the support of the Ministry of Tourism and state governments/union territory administrations in New Delhi. It provided a national platform to different tourism stakeholders for interacting with foreign buyers under one umbrella.

Swachh Paryatan Mobile App

'Swachh Paryatan Mobile App[1] operated by the Ministry of Tourism for 25 Adarsh Smarak Monuments has been also made available for Windows phones and iPhone. Earlier, it was available for Android phones only. This mobile app is being monitored by the Project Monitoring Unit of Swachh Bharat Mission in Ministry of Tourism. The Ministry has launched an initiative for providing preloaded SIM cards to foreign tourists arriving in India on e-Visa. This initiative was launched in 2017 in association with Bharat Sanchar Nigam Ltd. (BSNL), wherein BSNL would distribute pre-loaded SIM cards to foreign tourists on e-Visa. This facility will be initially available at the Indira Gandhi International Airport (T3 Terminal), New Delhi, and later in the remaining 15 international airports, where e-Visa facility is currently available. This initiative is aimed at providing connectivity to foreign tourists to enable them to stay in touch with their family and friends and also help them to contact with the 24x7 multi-lingual toll free helpline of the Ministry for any assistance and guidance during times of distress, medical emergency, etc.

6 Basic Economic Data

THE Ministry of Statistics and Programme Implementation (MoSPI) came into existence as an independent ministry in 1999 after the merger of the Department of Statistics and the Department of Programme Implementation. The Ministry has two wings, one relating to statistics and the other relating to programme implementation. The Statistics Wing redesignated as National Statistics Office (NSO), consists of the Central Statistical Office (CSO) and the National Sample Survey Office (NSSO). The Programme Implementation Wing has three divisions, namely: (i) twenty point programmes, (ii) infrastructure and project monitoring; and (iii) Members of Parliament Local Area Development Scheme. Besides these three wings, there is National Statistical Commission (NSC) created through a resolution of Government of India and one autonomous institute, viz., Indian Statistical Institute (ISI) declared as an institute of national importance by an Act of Parliament.

Website: www.mospi.gov.in

National Statistical Commission

The National Statistical Commission (NSC) was set up in 2005. The setting up of the NSC followed the decision of the Cabinet to accept the recommendation of the Rangarajan Commission, which reviewed the Indian statistical system in 2001. The NSC was initially constituted in 2006, to serve as a nodal and empowered body for all core statistical activities of the country, to evolve, monitor and enforce statistical priorities and standards and to ensure statistical coordination. It has one part-time Chairperson and four part-time members, each having a specialisation and experience in specified statistical fields. Besides, Secretary, Planning Commission, is an ex-officio member of the Commission. The Chief Statistician of India is the Secretary to the Commission. He is also the Secretary to the Government of India in the Ministry of Statistics and Programme Implementation.

Central Statistics Office

The Central Statistics Office (CSO), an attached office of the Ministry, coordinates the statistical activities in the country and evolves statistical standards. Its activities *inter-alia,* include compilation of national accounts, index of industrial production, consumer price indices (urban/rural/combined), human development statistics, including gender statistics in the states and union territories, and dissemination energy statistics, social and environment statistics and preparation of the National Industrial Classification.

The CSO, Ministry of Statistics and Programme Implementation started releasing state/UT-wise as well as All India Consumer Price Indices (CPI) separately for rural, urban and combined (rural plus urban) for the purpose of temporal price comparison with effect from January 2011 with 2010 as the base year. Accordingly, the annual inflation rates, based on these indices were made available since January 2012. CSO revised the base year of CPI form 2010 to 2012 and the revised series was launched in 2015. The back series for the revised series of CPI was also made available for the users. All these information may be accessed from the website of this Ministry (www.mopsi.gov.in).

Annual Survey of Industries

The Annual Survey of Industries (ASI) is the principal source of industrial statistics in India. It provides statistical information to assess and evaluate, objectively and realistically, the changes in the growth, composition and structure of the organised manufacturing sector comprising activities related to manufacturing processes, repair services, generation, transmission, etc., of electricity, gas and water supply and cold storage. The survey is statutory in nature under the Collection of Statistics Act, 2008 (as amended in 2017) and the rules framed there under.

The ASI extends to the entire country. The survey covers all factories registered under Sections 2m (i) and 2m (ii) of the Factories Act, 1948. The survey also covers *bidi* and cigar manufacturing establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act, 1966. All the electricity undertakings engaged in the generation, transmission and distribution of electricity are registered with the Central Electricity Authority (CEA). Certain services and activities like cold

storage, water supply, repair of motor vehicles, other consumer durables like watches, etc., are covered under the survey. Defence establishments, oil storage and distribution depots, restaurants, hotels, cafe and computer services and the technical training institutes are excluded from the purview of this survey. The electricity undertakings registered with the CEA are not being covered.

Index of Industrial Production

NSO compiles the Index of Industrial Production (IIP) using secondary data received from 14 source agencies in various ministries/ departments or their attached/subordinate offices. IIP is released every month in the form of Quick Estimates with a time-lag of 6 weeks as per the Special Data Dissemination Standard norms of IMF. Apart from breakup of the index for mining, manufacturing and electricity sectors, the estimates are also simultaneously being released as per use-based classification viz., primary goods, capital goods, intermediate goods, infrastructure/construction goods, consumer durables and consumer non-durables. The major source of data for IIP is, however, the Department for Promotion of Industries and Internal Trade that supplies data for 322 out of 407 item groups with a weight of 47.54 per cent in overall IIP. The press releases, data (sectoral and use-based category), metadata, and details of methodology of all India IIP with base year 2011-12 are available on the website (http://www.mospi.gov.in/iip-2011 -12-series).

National Sample Survey Office

The National Sample Survey Office (NSSO), in the Ministry of Statistics and Programme Implementation, is responsible for conducting of large-scale sample surveys, in diverse fields, on all India basis. Primary data is collected regularly through nationwide household surveys on various socio-economic subjects, Annual Survey of Industries (ASI) under the Collection of Statistics Act and Enterprise Surveys, as a follow up of the economic census. Besides these surveys, NSSO collects data on rural and urban prices; plays a significant role in the improvement of crop statistics through supervision of the area enumeration and crop estimation surveys of the state agencies. It also maintains a frame of urban areal units for drawing samples for socio-economic surveys in

urban areas. The NSSO functions with requisite autonomy, in matters relating to data collection, processing and publication/dissemination of results/data based on its surveys, under overall guidance and supervision of National Statistical Commission (NSC) which appoints working groups/technical committees comprising both official and non-official members on different subjects for the finalisation of survey instruments for its surveys and methodologies for the same. The Director General (Survey) is responsible for overall coordination and supervision of all activities of NSSO and is assisted by four Additional Director Generals, each one being in-charge of separate divisions responsible for four distinct aspects of such large-scale surveys relating to their designing and planning, field work, data processing and coordination.

Seventh Economic Census

The 7th Economic Census (EC) was conducted in 2019 under the Capacity Development Scheme. As on December 31, 2019, field work was started in 28 states/UTs and will be launched shortly in remaining states/ UTs. The data is being collected on a mobile app through door-to-door survey of each household and commercial establishment across the country under the provisions of Collection of Statistics Act, 2008.

Price Statistics

NSO under MoSPI started compiling Consumer Price Index (CPI) separately for rural, urban, and combined sectors on monthly basis with base year (2010=100) for all India and states/UTs with effect from January 2011. It revised the base year of the CPI from 2010=100 to 2012=100, incorporating many methodological improvements in consonance with the international practices. The basket of items and weighing diagrams for the revised series has been prepared using the Modified Mixed Reference Period (MMRP) data of the Consumer Expenditure Survey (CES), 2011-12 of the 68th Round of National Sample Survey (NSS). In addition, Consumer Food Price Index (CFPI) is also being released as weighted average of the indices of ten sub-groups: cereals and products; meat and fish; egg; milk and products; oils and fats; fruits; vegetables; pulses and products; sugar and confectionery; and spices. It does not include non-alcoholic beverages and prepared meals, snacks, sweets, etc.

Consumer Price Index (Urban)

Consumer Price Indices (CPI) for urban areas measure the changes over time in general level of retail prices of goods and services for the purpose of consumption relevant to the entire urban population in the country that households acquire. The current base year for CPI (U) is 2012=100. Price data collection is done for 1,078 quotations per month from 310 towns across the country. Collection/transmission of monthly retail prices in the urban prices portal of CPI(U) is being done re1gularly by the NSSO.

Consumer Price Index (Rural)

MoSPI has been entrusted with the work of CPI (Rural) from September 2018 after the handover of task from the Department of Posts. The base year of CPI (Rural) is same as that of CPI (Urban), i.e., 2012=100. Price data collection is being carried out from the markets located in 1,181 villages across the country.

Statistics Day

In recognition of the notable contributions made by (Late) Professor Prasanta Chandra Mahalanobis in the field of economic planning and statistical development, the Government of India designated 29th June every year, coinciding with his birth anniversary, as the Statistics Day to be celebrated at the national level. The objective of this Day is to create public awareness, among the people specially the younger generation for drawing inspirations from Prof. Mahalanobis about the role of statistics in socio-economic planning and policy formulation.

Twenty Point Programme

The Twenty Point Programme (TPP) initiated in 1975 was restructured in 1982, 1986 and 2006. The thrust of the Programme restructured in 2006 was to eradicate poverty and improve the quality of life of the poor and the underprivileged people all over the country. The programme covers various socioeconomic aspects like poverty, employment, education, housing, agriculture, drinking water, afforestation and environment protection, energy to rural areas; welfare of weaker sections of the society, etc.

The Programme originally consisted of 20 points and 66 items being monitored individually by central nodal ministries concerned. Out of the 66 items, 25 were for monthly monitoring, while the rest were to be

monitored on annual basis by this ministry. The monthly information in respect of 21 items was collected from various states/union territories and for the remaining four, the information was collected from the concerned ministries. One of the 66 items viz., 'Sampoorna Grameen Rojgar Yojana (SGRY)' has since been subsumed into another item namely 'National Rural Employment Guarantee Act' with effect from 2008 and has been renamed as Mahatma Gandhi National Rural Employment Guarantee Act from December 2009. Since 2014 the data collection is done on quarterly basis and the monthly monitoring has been changed to quarterly monitoring. At present, out of the remaining 65 items, 19 items are being monitored on quarterly basis. The monitoring mechanism for TPP-2006 has also been widened by including block level monitoring in addition to the existing central, state and district level monitoring.

Monitoring Mechanism

The primary responsibility of implementation and monitoring of the programme lies with the agencies entrusted with the execution of the programme, which in this case are the state governments/union territory administrations and the central nodal ministries. The Ministry of Statistics and Programme Implementation monitors the programmes/schemes covered under TPP-2006 on the basis of performance reports received from state governments/UT administrations and ministries. The Ministry has developed a web-based Management Information System to expeditiously collect information from the state governments and the central nodal ministries.

Monitoring Committees at state, district and block level, for monitoring the progress of implementation of all schemes/items covered under the Twenty Point Programme-2006, have been constituted by most of the states/union territories as per the provisions of TPP-2006 guidelines.

Monitoring and Impact Assessment

The Ministry has so far undertaken two impact assessment studies. The first study relates to impact of MGNREGA in three selected districts of north-eastern states and the second study was on rehabilitation of disabled persons under Deendayal Disability Rehabilitation Scheme (DDRS) in Delhi, Karnataka, Madhya Pradesh and West Bengal. The

Ministry has also undertaken the task of critically examining the reports of evaluation undertaken by Niti Aayog (erstwhile Planning Commission) and by the central nodal ministries of the schemes implemented by them.

Infrastructure Monitoring

The monitoring of important infrastructure sectors in the country is designed to provide an overview of the performance and highlighting slippages, if any, before the decision-making authorities. This Ministry monitors the performance of the 11 key infrastructure sectors viz., power, coal, steel, cement, fertilizers, petroleum, road, railways, shipping and ports, civil aviation and telecommunications. The performance of these sectors is analysed with reference to the present targets for the month and for the cumulative period and the achievements during the corresponding month and cumulative period of the last year. Infrastructure performance is regularly reported through the monthly review report on infrastructure performance.

Members of Parliament Local Area Development Scheme

The Members of Parliament Local Area Development Scheme (MPLADS) was launched in 1993. Initially, Ministry of Rural Development was the nodal ministry for this scheme. In October 1994, this scheme was transferred to the Ministry of Statistics and Programme Implementation. The objective of MPLADs is to enable MPs to recommend works of developmental nature with emphasis on creation of durable community assets in the areas of national priorities, viz., drinking water facility; education; electricity facility; health and family welfare; irrigation facility; non-conventional energy severs; railways, roads, pathways and bridges; sanitation and public health, etc., based on the locally felt needs. This scheme is governed by a set of guidelines. The extant guidelines on the scheme were revised and published in 2016.

The salient features of the scheme include:

(a) The scheme is fully funded by the Government of India under which funds are released in the form of grants-in-aid directly to the district authorities.

(b) The funds released under the scheme are non-lapsable, i.e., the entitlement of funds not released in a particular year is carried forward to the subsequent years, subject to eligibility. At present, the annual entitlement per MP/constituency is ₹ 5 crore.

(c) Under it, the role of the Members of Parliament is limited to recommending works. Thereafter, it is the responsibility of the district authority to sanction, execute and complete the recommended works within the stipulated time period.

(d) The elected Lok Sabha Members can recommend works in their respective constituencies. The elected members of the Rajya Sabha can recommend works anywhere in the state from which they are elected. Nominated Members of the Parliament can recommend works for implementation, anywhere in the country.

(e) MPLADS works can be implemented in areas affected by natural calamities like floods, cyclone, hailstorm, avalanche, cloudburst, pest attack, landslides, tornado, earthquake, drought, tsunami, fire and biological, chemical, radiological hazards, etc.

(f) In order to accord special attention to the development of areas inhabited by Scheduled Castes (SCs) and Scheduled Tribes (STs), 15 per cent of MPLADS funds are to be utilised for areas inhabited by SC population and 7.5 per cent for areas inhabited by ST population.

(g) If an elected Member of Parliament finds the need, to contribute these funds, to a place outside that state/UT or outside the constituency within the state or both, the MP can recommend eligible works, under these guidelines up to a maximum of ₹25 lakh in a financial year. Such a gesture will promote national unity, harmony, and fraternity among the people, at the grass roots level.

(h) The MP can spend a maximum of ₹ 20 lakh per year for giving assistance to Differently Abled Citizens for purchase of tri-cycles (including motorised tri-cycles), battery operated motorised wheelchair and artificial limbs; and aids for visually and hearing impaired.

7 Commerce

THE Department of Commerce comes under the Ministry of Commerce and Industry, Government of India. The mandate of the Department of Commerce is regulation and development of India's international trade and commerce. The Department formulates, implements and monitors the Foreign Trade Policy (FTP), which provides the basic framework of policy and strategy to be followed for promoting exports and trade. The Department is also entrusted with responsibilities relating to multilateral and bilateral commercial relations, Special Economic Zones, State Trading, export promotion, trade facilitation, and development and regulation of certain export-oriented industries and commodities.

Website : www.commerce.gov.in

Trade Performance

India's global trade (sum of merchandise and services exports and imports) reached USD 1,127 billion in FY 2019-20. Imports exceeded exports by USD 77.0 billion.

India's overall exports (Merchandise and Services combined) in 2019-20 were USD 526.3 billion, exhibiting a negative growth of (-) 2.2 per cent over the same period last year. Overall imports in 2019-20 were USD 603.1 billion, exhibiting a negative growth of (-) 5.8 per cent over the same period last year.

Merchandise Exports

India is the 18th largest exporter of merchandise goods in the world with a share of 1.7 per cent. In FY 2019-20, India's total merchandise exports were USD 313.4 billion. Major product categories and their share in export basket in FY 2019-20 are: chemicals and related products (14.37 per cent), Petroleum and products (13.18 per cent), gems and jewellery (11.46 per cent), textiles and allied products (10.76 per cent)

and machinery (9.12 per cent). Top 5 export destinations and their share in India's exports are: USA (16.95 per cent); UAE (9.21 per cent); China (5.3 per cent); Hong Kong (3.5 per cent); and Singapore (2.85 per cent).

Merchandise Imports

During the FY 2019-20, India's merchandise imports were valued at USD 474.7 billion. Imports as a percentage of GDP have fallen from 18.1 per cent in FY 2015-16 to 16.5 per cent in FY 2019-20. Top 5 import categories in terms of share in India's import basket in FY 2019-20 are: petroleum crude and products (27.5 per cent); gems and jewellery (11.47 per cent); electronics items (11.06 per cent); machinery (9.52 per cent); and chemicals and related products (9.33 per cent).

The major import sources in 2019-20 were China (13.8 per cent); USA (7.6 per cent); UAE (6.4 per cent); Saudi Arabia (5.7 per cent); and Iraq (5 per cent).

Services Trade

Services sector for India, which has been a major force in driving the growth of the economy, contributed 55 per cent to Gross Valued Added (GVA) and 41 per cent to total exports in 2019-20 (P). Over the years, steady surplus is being maintained in services trade. Services Exports in 2019-20 (P) stood at USD 213.2 billion up from USD 208 billion recorded in 2018-19 growing at the rate of 2.5 per cent. Services imports in 2019-20 (P) stood at USD 128.3 billion up from USD 126.1 billion recorded in 2018-19.

Trade Balance

Taking merchandise and services together, overall trade deficit was USD 77 billion in FY 2019-20 as compared to USD 102.1 billion in FY 2018-19.

Global Perspective

A challenging global trade environment since 2014-15 led to a downturn in global trade mainly due to global economic slowdown, growing protectionist tendencies worldwide, and US trade war etc.

However, since January 2020, current growth is further under stress with the spread of Covid-19.

Global Economic Prospects released by World Bank in June 2020 mentioned, ”Covid-19 pandemic will result in contractions across the vast majority of emerging market and developing economies. It will also do lasting damage to labour productivity and potential output.”

Despite the challenging global trade environment, India’s merchandise exports saw three years of consistent growth to reach a new peak of over USD 330 billion in FY 2019. India’s total exports, inclusive of services, crossed half a trillion dollars for the first time to reach a new high of USD 538.1 billion in FY 2019. This feat was repeated in FY 2020. Current export growth, however is affected by the trade slowdown aggravated by Covid-19.

Response to Covid-19

In response to Covid-19, government worked on enhancing production capacities of essential drugs and other materials to support the healthcare systems around the world. The PPE production capacity was thus revamped to half a million kits everyday from virtually nil earlier and India unconditionally facilitated assistance requests of many countries for exports of critical drugs and medicines. As a result, India supplied around 45 tons and 400 million tablets of hydroxychloroquine to around 114 countries globally. Similarly, paracetamol supplies of around 96 million tablets; 0.4 million of suspension IP; 0.8 million bottles and 270 MT in various other forms, were sent to 24 countries, along with supplies of other essential materials to about 57 countries. These measures reinforced India’s credibility as a reliable, trustworthy and empathetic partner working for the common good.

Foreign Trade Policy

The Foreign Trade Policy (FTP), the basic framework of policy and strategy for promoting trade from India has conventionally been formulated for five years at a time, and reviewed periodically. The FTP for 2015-20, announced in April 2015, provided a framework for increasing exports of goods and services as well as generation of

employment and increasing value addition in the country, in keeping with the ”Make in India” vision of the country.

The Foreign Trade Policy lays down a roadmap for India’s global trade engagement in the coming years. It seeks to enable India to respond to the challenges of external environment, keeping in step with rapidly evolving international trading architecture and most importantly, make trade a major contributor to the country’s economic growth and development. The FTP is aligned with the broader priorities of the Government of India such as the implementation of ‘Goods and Services Tax’; ‘Digital India’; ‘Skill India’; ‘Startup India’; ‘Ease of Doing Business’; and ‘Trade Facilitation’ initiatives. Because of the pandemic the FTP 2015-20, has been extended by one year, i.e., up to March 31, 2021.

Major Schemes for Export Promotion

Duty Exemption/Remission Schemes

Duty neutralisation/remission schemes are based on the principle and the commitment of the government that goods and services are to be exported and not the taxes and levies. Its purpose is to allow duty-free import/ procurement of inputs or to allow replenishment either for the inputs, used or the duty component on inputs used. Brief of these schemes are as follows:

Advance Authorisation Scheme

Advance Authorisation Scheme allows duty-free import of inputs, along with fuel, oil, catalyst, etc., required for manufacturing the export product. Inputs are allowed either as per Standard Input Output Norms (SION) or on ad hoc norms basis under actual user condition. Norms are fixed by Technical Committee or Norms Committee. This facility is available for physical exports (also including supplies to SEZ units and SEZ Developers) and deemed exports including intermediate supplies. Minimum value addition prescribed is 15 per cent except for certain items. Exporter has to fulfill the export obligation over a specified time period, both quantity and value wise. The facilities to club authorisations were simplified and powers decentralised to regional authorities. Certain items which were prohibited for export have been allowed under advance authorisation scheme, subject to stipulated conditions.

Duty Free Import Authorisation (DFIA)

Under DFIA scheme operational from 2006, Duty Free Import Authorisation shall be issued on post export basis for products for which Standard Input Output Norms (SION) have been notified, once export is completed. One of the objectives of the scheme is to facilitate transfer of the authorisation or the inputs imported as per SION, after exports are completed. Provisions of DFIA scheme are similar to Advance Authorisation Scheme. A minimum value addition of 20 per cent is required under the scheme.

Schemes for Gems and Jewellery Sector

Gems and jewellery exports constitute a major portion of our total merchandise exports. It is an employment oriented sector. Exports from this sector suffered significantly on account of the global economic slowdown. Duty free import/procurement of precious metal (gold/silver/platinum) from the nominated agencies is allowed either in advance or as replenishment. Duty Free Import Authorisation scheme shall not be available for the Gems and Jewellery Sector. The schemes for Gems and Jewellery Sector are -advance procurement/replenishment of precious metals from nominated agencies; replenishment authorization for gems; replenishment authorisation for consumables; and advance authorization for precious metals. In view of demand raised by the industry, the findings like posts, push backs and locks, which help in collating the jewellery pieces together, containing gold of 3 carats and above up to a maximum limit of 22 carats have also been allowed under the scheme.

Issuance of Authorisation under Duty Remission Schemes

Authorisations are issued under the various schemes, viz., Advance Authorisation, Duty Free Import Authorisation (DFIA) and Replenishment License (Gems and Jewellery).

Export Promotion of Capital Goods (EPCG)

The objective of the EPCG scheme is to facilitate import of capital goods for producing quality goods and services to enhance India's export competitiveness. The Scheme allows import of capital goods at zero customs duty subject to an export obligation equivalent to 6 times of duties and taxes.

Export from India Schemes

Merchandise Exports from India Scheme (MEIS) facilitates export of notified products through issuance of a transferable duty credit scrip to the exporter. These scrips could be used for paying import duty. MEIS was introduced in the Foreign Trade Policy (FTP) 2015-20 in April 2015 with the objective to set off infrastructural inefficiencies and associated costs involved in exporting goods which are either produced or manufactured in India.

Directorate General of Foreign Trade

Directorate General of Foreign Trade (DGFT) is an attached office of the Ministry of Commerce and Industry and is headed by Director General of Foreign Trade. Right from its inception till 1991, when liberalisation in the economic policies of the government took place, this organisation has been essentially involved in the regulation and promotion of foreign trade through regulation. Keeping in line with liberalisation and globalisation, and the overall objective of increasing of exports, DGFT has since been assigned the role of ”facilitator”. The shift was from prohibition and control of imports/ exports to promotion and facilitation of exports/imports, keeping in view the interests of the country. This Directorate, with headquarters at New Delhi, is responsible for formulating and implementing the Foreign Trade Policy with the main objective of promoting India’s exports. The DGFT also issues scrips/ authorisation to exporters and monitors their corresponding obligations through a network of 38 regional offices and an extension counter at Indore. The regional offices are located at Ahmedabad, Amritsar, Bengaluru, Belagavi, Bhopal, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Ernakulam (Kochi), Guwahati, Hyderabad, Jaipur, Jammu, Kanpur, Kolkata, Ludhiana, Madurai, Moradabad, Mumbai, Nagpur, New Delhi, Panaji (Goa), Panipat, Patna, Puducherry, Pune, Raipur, Rajkot, Shillong, Srinagar, Surat, Thiruvananthapuram, Varanasi, Visakhapatnam, Vadodara and Vijayawada. DGFT HQ and many of its regional offices are ISO 9000:2008 certified organisations. All regional offices provide facilitation to exporters in regard to developments in international trade, i.e., WTO agreements, Rules of Origin and anti-dumping issues, etc., to

help exporters in their import and export decisions in an internationally dynamic environment.

Website : www.dgft.gov.in

Web Portals

DGFT has launched an updated website, making it more user-friendly and easy to navigate. This website has a large dynamic component whereby the trade community can file applications online for IEC and various other schemes. Indian Trade Portal launched by the Department displays information useful for exports and imports. It contains the trade enquiries uploaded by Indian trade missions, tariff and trade data of India's major trade partners, export market reports, and trade agreements, etc.

Capacity Building

Skilling new entrepreneurs for exports is an important priority. In the last two years, over 50,000 entrepreneurs have been trained under the Niryat Bandhu programme implemented by DGFT, thus complementing the Startup India and Skill India initiatives. Institutional set up under the Department - Indian Institute of Foreign Trade, Indian Institute of Packaging, Indian Institute of Plantation, Export Promotion Councils, Centres of Excellence, Plantation Research Institutes, etc., are being leveraged for capacity building, export promotion, research and analysis and long term policy formulation.

Special Economic Zones

India was one of the first countries in Asia to recognise the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. Seven more zones were set up thereafter. Subsequently to achieve greater economic activity and employment, the Special Economic Zone Act was enacted with a user-friendly regulatory framework. The SEZ Act, 2005, supported by SEZ Rules, came into effect on February 10, 2006. All the 8 pre-existing Export Processing Zones (EPZs) located at Kandla and Surat (Gujarat), Santa Cruz (Maharashtra), Cochin (Kerala), Chennai (Tamil Nadu), Visakhapatnam (Andhra Pradesh), Falta (West Bengal) and Noida (Uttar

Pradesh) were converted into Special Economic Zones. SEZs being set up under the SEZ Act, 2005 are primarily private investment driven. Cent per cent FDI is allowed in SEZs through automatic route.

The total investment in SEZs till June 30, 2020 was ₹ 5,81,021 crore, including ₹ 5,45,874 crore in the newly notified SEZs set up after SEZ Act, 2005. Physical exports from the SEZs have increased from ₹ 7,01,179 crore in 2018-19 to ₹ 7,96,669 crore in 2019-20, registering a growth of 13.62 per cent. There has been an overall growth of export of 3,388 per cent over past 14 years (2005-06 to 2019-20).

Export Oriented Units

The Export Oriented Units (EOUs) Scheme was introduced in 1981 as a complementary scheme to the Free Trade Zones/Export Processing Zone (EPZ) Scheme, to boost exports by creating additional production capacity. It has broadly similar regulatory regime as SEZs but offers a wide option in locations. EOUs have to export entire production except the part permissible for sales in the DTA. The EOUs function under the administrative control of the concerned Development Commissioner of Special Economic Zone. EOUs are mainly concentrated in textiles and yarn; food processing; gems and jewellery; computer software; electronics; chemicals; plastics; granites and minerals/ores. As on August 21, 2020, total 1,771 units were in operation under the EOU scheme.

Trade Remedies

The Directorate General of Trade Remedies (DGTR) aims to ensure a level playing field to the domestic industry through comprehensive trade remedy mechanism to counter the adverse impact of the unfair trade practices like dumping and subsidisation adopted by exporting countries/foreign producers and exporters. It also provides trade defence support to Indian exporters in trade remedy investigations instituted against them by other countries. DGTR functions under the framework of WTO agreements, Customs Tariff Act & Rules and other relevant laws in a transparent and time-bound manner.

DGTR administers all trade remedial measures viz., anti-dumping duties, countervailing duties and safeguarding measures, besides undertaking trade defence activities. DGTR has been formed in May 2018 by merging the functions of Directorate General of Safeguards (DGS) and Safeguards Quantitative Restriction (QR) functions of Directorate General of Foreign Trade (DGFT) with the activities of erstwhile Directorate General of Antidumping and Allied Duties (DGAD).

DGTR in the last few years has undertaken several initiatives towards promoting transparency, uniformity and accountability by streamlining and standardising its procedures and processes and enabling digitisation and paperless environment. DGTR reaches out to the industry, particularly MSMEs, to sensitise them and create awareness about the existing trade remedy framework to protect them from unfair trade practices.

Government e-Marketplace

The Government e-Marketplace (GeM) platform was launched on August 9, 2016. The government approved on April 12, 2017 the setting up of the Government e-Marketplace (GeM) Special Purpose Vehicle (SPV) as the National Public Procurement Portal for providing procurement of goods and services required by central and state government organisations. With multiple procurement modes, in-built policies for automated market adjustments and end-to-end digital process to enable a vibrant buyer-seller ecosystem, GeM has drastically brought down waiting times and prices for buyers and ensured timely payments to the sellers. There are more than 46,000 government organisations and over 5.23 lakh vendors registered on the portal. GeM has over 21.43 lakh products and 140 services and GeM has facilitated transactions for over ₹ 62,800 crore.

The platform has transformed legacy procurement systems through a disruptive marketplace model and the use of technology, analytics and digitization of processes. The platform provides for all the modes of procurement, viz., direct purchase, L1 procurement, bidding, and reverse auction.

GeM has taken a number of steps to contribute to the nation's fight against the Covid-19 pandemic. Several Covid-19 specific categories have been created for government organisations and the Corona warriors who are fighting this pandemic.

Export Promotion Initiatives

The key domestic and trade policy measures for increasing exports, reducing imports and moving towards a developed and *Aatmanirbhar Bharat,* include:

(I) Phasing out of the MEIS and Introducing Remission of Duties and Taxes on Export Product (RoDTEP) scheme

MEIS faces a challenge as a "prohibited subsidy" under the WTO Agreement on Subsidy and Countervailing Measures (ASCM) at the WTO. To ensure that exports are not adversely affected, MEIS would be replaced by a WTO compatible, RoDTEP scheme. Accordingly, the government has decided to withdraw the Merchandise Exports from India Scheme (MEIS).

A new scheme Remission of Duties or Taxes on Export Product (RoDTEP) has been approved. The RoDTEP scheme would refund, as stipulated, the currently un-refunded (i) duties/taxes/levies, at the central, state and local level, borne on the exported product, including prior stage cumulative indirect taxes on goods and services used in the production of the exported product.

(II) Promoting Agriculture Exports

The Agriculture Export Policy introduced in December 2018 for promoting agriculture exports is being vigorously implemented with support of state governments in a decentralised cluster-based focus, while tying up all linkages from farm to the port. As part of the Agriculture Export Policy, a number of unique product-district clusters have been identified for export promotion.

(III) Champion Services Sector Initiative for Promoting and Diversifying Services Sector

In 2019-20, software services accounted for 43.7 per cent of India's total services exports. For sustained and vibrant growth of the sector, there is an urgent need to achieve diversification across a broad range of

high potential sectors; (i) IT& ITeS; (ii) tourism and hospitality; (iii) medical value travel; (iv) transport and logistics; (v) accounting and finance; (vi) audio visual; (vii) legal services; (viii) environmental services; (ix) financial services; (x) education services; (xi) communication services; and (xii) construction and related engineering services.

(IV) Focus on Substantially Enhancing Ease of Doing Business

India's overall rank in World Bank's Ease of Doing Business rankings improved from 142 in 2014 to 63 in 2019. This significant improvement of 79 ranks in 6 years became possible due to focused work at both the operational and policy level. Current ease of doing business focus in export sector is towards making the process paperless and contactless and includes further strengthening the single window for trade, which has enabled paperless and digitized online export/import clearances through integration of various regulatory approval domains.

(V) Promoting Quality through Standards/Regulations

Department of Commerce is working with key departments concerned on strengthening quality ecosystem through adoption/implementation of technical regulations. Continuous efforts are being made to adopt technical regulations for focus products (120 billion USD imports) to enhance competitiveness and product quality and address sub-standard imports.

(VI) Developing Districts as Export Hubs

In order to convert each district into an export hub, Department of Commerce through DGFT is engaging with state and central government agencies to take forward this initiative in each district and implement it in a phased manner. The objective is to convert each district of the country into an export hub by identifying products with export potential in the district, addressing bottlenecks for exporting these products, supporting local exporters/ manufacturers to scale and find potential buyers outside the country with the aim of promoting exports.

(VII) Trade Infrastructure for Export Scheme

Trade Infrastructure for Export Scheme (TIES) supports development of export linked infrastructure that can be utilised by multiple exporters. The scheme provides assistance for setting up and upgradation of

infrastructure projects with overwhelming export linkages like the border haats; land customs stations; quality testing and certification labs; cold chains; trade promotion centres; dry ports; export warehousing and packaging; SEZs, ports/ airports cargo terminuses; and first mile and last mile connectivity for export-oriented projects.

8 Communications and Information Technology

COMMUNICATIONS and information technology in the country are handled by the Ministry of Electronics and Information Technology and Ministry of Communications. The Ministry of Electronics and Information Technology promotes e-governance and sustainable growth of the electronics, IT and ITeS industries, enhancing India's role in internet governance while the Ministry of Communications looks after the Department of Posts and Department of Telecommunications. Main activities and initiatives of these departments are given here.

Websites: www.meity.gov.in www.indiapost.gov.in

Posts

The modern postal system, the most preferred facilitator of communication, was established in India by Lord Clive in 1766 and it was further developed by Warren Hastings in1774. The expansion of its network was made during 1786 to 1793. For the first time, the post offices were regulated through an Act of 1837 on a uniform basis to unite all the post office establishments throughout the then existing three Presidencies into one all-India service. Thereafter, the Post Office Act of 1854 reformed the entire fabric of the postal system and the post offices of India were placed on the present administrative footing on October 1,1854. This was the time when the first postage stamp valid across the country was issued at an affordable and uniform rate of postage, fixed by weight and not by distance. For the first time, the common man could use a facility which included free delivery of letters from door to door—a privilege previously enjoyed only by heads of states and state officials. Since then, the post office touched the life of every person of the country. Even though the British established the post office for imperial interests, it along with the railways and telegraph, became one of the greatest engines of social development.

The statute presently governing the postal services in the country is the Indian Post Office Act, 1898. In the mid-19th century, the post office served as facilitator of travel with its conveyance systems and by maintaining the dak bungalows and dak serais. Mail order services were started with the value payable system introduced in 1877, while fund remittances at the doorstep became possible from 1880 through money order services. With the introduction of the Post Office Savings Bank in 1882 banking facilities were accessible to all and by 1884 all government employees were covered by the postal life insurance. Besides providing postal communication facilities, the post office network has also provided facilities for remittance of funds, banking and insurance services since the latter half of the 19th century.

Organisation Overview

The Department of Posts comes under the Ministry of Communications. The Postal Service Board, the apex management body of the department, comprises the Chairman and six members. The six members of the Board hold portfolios of personnel, operations, technology, postal life insurance, banking and HRD and planning. The Joint Secretary and Financial Advisor to the department is a permanent invitee to the Board. The Chairman of Postal Services Board is also the Secretary of the Department of Posts. Director General and Additional Director General of the Department also participate in the Board's meetings.

Financial Services

Department of Posts is operating Small Savings Schemes on behalf of Ministry of Finance, which frames and modifies rules relating to these schemes and pays remuneration to the Department of Posts. Post Office Savings Bank (POSB) has a customer base. Savings bank facility is provided through a network of 1.56 lakh post offices across the country. The Post Office savings bank operates savings accounts, Recurring Deposit (RD), Time Deposit (TD), Monthly Income Scheme (MIS), Public Provident Fund (PPF), National Savings Certificate (NSC), Kisan Vikas Patra (KVP), Senior Citizens Savings Scheme (SCSS) and Sukanya Samriddhi account.

Mutual Funds

The post office is playing an important role in extending the reach of the capital market of the country and providing the common man easy access to market based investment options. Presently, Mutual Fund products of UTI only are being retailed through over 2,000 post offices.

International Money Transfer Service

International money transfer service is a quick and easy way of transferring personal remittances from abroad to beneficiaries in India. As a result of the collaboration of Department of Posts, the Government of India with Western Union Financial Services a state-of-the-art international money transfer service is available through the post offices in the country, which enables instantaneous remittance of money from around 195 countries to India.

National Pension Scheme

National Pension Scheme (NPS), earlier known as New Pension System, for common citizens was introduced by government in 2009. India Post is a point of presence for the national pension system. Subscribers (any Indian citizen) in the age group of 18 to 55 can join NPS and contribute till the age of 60. These pension contributions are invested in various schemes of different pension fund managers appointed by Pension Fund Regulatory and Development Authority (PFRDA).

Social Security Scheme

Jan Suraksha Schemes like the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) were launched in 2015 in all CBS post offices for all post office savings account holders. Department of Posts has signed Memorandum of Understanding (MoU) with National Insurance Company (NIC) and Life Insurance Corporation of India (LIC) for PMSBY and PMJJBY respectively. Atal Pension Yojana (APY) was launched in all CBS head post offices from 2015.

Core Banking Solution & Installation of ATMs

The Core Banking Solution (CBS) is part of the India Post IT Modernisation project that aims to bring in various IT solutions with the required infrastructure to the post offices. The project aims to implement Core Banking Solution in all the Departmental Post Offices for Small

Savings Schemes during current Plan period. The project will bring in facilities of ”any time anywhere banking”, ATM and Internet Banking facilities.

Sukanya Samriddhi Account

Sukanya Samriddhi Account, a new Small Savings Scheme for the welfare of girl child, was launched in 2015. Under the scheme, a legal/natural guardian can open only one account in the name of one girl child and maximum two accounts in the name of two different girl children up to 10 years from the date of birth of the child.

India Post Payments Bank

India Post Payments Bank (IPPB) was set up in 2016 with a mandate to build a most accessible, affordable and trusted bank for the common man by removing the barriers for the unbanked and promote the adoption of cashless transactions in a predominantly cash based economy. IPPB got incorporated as a Public Limited Company with 100 per cent GOI equity under Department of Posts. It was decided to roll out 650 IPPB branches across the country co-located at district headquarter post offices and all post offices in a district will be linked to the respective IPPB branch. Accordingly, IPPB has rolled all the 650 branches and 1.36 lakhs access points. Thus, IPPB has become the biggest bank of the country in terms of physical presence of 1.36 lakhs access points along with a large force of 3 lakh trained and certified postmen and Gramin Dak Sevaks (GDS) to offer banking at doorstep.

IPPB is offering a bouquet of payments and their salient features are: (i) deposits-savings accounts, currents accounts; (ii) money transfer-simple and secure, instant, 24x7; (iii) direct benefit transfers-MGNREGA, scholarships, social welfare benefits and other government subsidies; (iv) third party products-loans, insurance, investments, post office savings scheme; (v) bill and utility payments-mobile and DTH recharge, electricity/water/gas bills, donations and insurance premium; and (vi) enterprises and merchant payments-postal products, digital payment of e-commerce delivery (CoD), small merchants/kirana stores/ unorganised retail, offline payments, cash management services.

Post Office Savings Bank (POSB) products primarily aim at savings whereas IPPB primarily focuses on encouraging digital payments and remittance. POSB has savings schemes such as SB, TD, MIS, PPF, SSY,

etc., whereas IPPB offers Savings Accounts & Current Accounts (CASA), Remittance and Bill Payment Services, Merchant Services and Third-Party Products. With the introduction of IPPB, Post Office Savings Account (POSA) accounts can be linked to an IPPB account which will enable access for POSA accounts to the interoperable banking ecosystem, thereby enabling them for IMPS, UPI, NEFT and RTGS and other online modes of payments like BBPS. Similarly, POSA accounts complement IPPB accounts by becoming a sweep-out destination for accounts which have balances above ₹ 1 lakh at end of the day. IPPB will also compliment e-commerce business of DoP by facilitating digital payments at the doorstep.

The DOP-IPPB system integration is to link crores of POSB accounts which are currently working in a closed loop system to the interoperable banking ecosystem and enable access to 24x7 services like mobile banking, electronic fund transfers, online bill payments, digital payments, etc. IPPB is to primarily focus on serving social sector beneficiaries; migrant labourers; unorganised sector employees; Micro, Small and Medium Enterprises (MSMEs); Panchayats; low-income households; in rural areas; and the unbanked and under-banked segments in both the rural and urban areas.

Rural Business

Department of Posts has a predominantly rural network of 1,41,018 post offices in rural areas out of the total 1,56,721 post offices in the country. The Rural Businesss (RB) Division of the Department of Posts (DoP) has been given the mandate of leveraging the rural network spread across the length and breadth of country to provide accessible and affordable financial and postal services to the people in rural areas.

Postal Life Insurance

Postal Life Insurance (PLI) was introduced on Februray 1,1884, as a welfare scheme for the benefit of postal employees and later extended to the employees of telegraph department in 1888. It now covers employees of central and state governments, central and state public sector undertakings, universities, government aided educational institutions, nationalised banks and local bodies. PLI also extends the facility of insurance to defence services and para-military forces. Life cover through Postal Life Insurance has been extended to employees of

scheduled commercial banks, credit co-operative societies, joint ventures having a minimum 10 per cent stake of central/state govt/PSUs/banks etc., universities/educational institutions affiliated to University Grants Commission/Central Board of Secondary Education/All India Council of Technical Education/Medical Council of India. Benefits of PLI are now available to professionals such as doctors, engineers, management consultants, charted accountants, architects, lawyers, bankers etc. and to employees of listed companies of NSE (National Stock Exchange) and BSE (Bombay Stock Exchange).

Starting with upper insurance limit of ₹ 4,000/-, maximum sum assured is now ₹ 50 lakhs (Rupees fifty lakhs) for all schemes. There are more than 64.50 lakh policy holders as on March 31, 2020 with a sum of ₹ 1,88,078.89 crore assured. Premium income of Postal Life Insurance for the year 2019-20 was ₹ 8,090. 68 crore. Postal Life Insurance also manages a Group Insurance Scheme for the Extra Departmental Employees (Gramin Dak Sevaks) of the Department of Posts.

Rural Postal Life Insurance

Rural Postal Life Insurance (RPLI) was started in 1995. The prime objective of the scheme is to provide insurance cover to the rural public in general and to benefit weaker sections and women workers of rural areas in particular and also to spread insurance awareness among the rural population.

With liberalization of insurance sector, PLI and RPLI are operating in a very competitive market. PLI and RPLI continue to offer life insurance cover at lower premium rate and higher bonus. Therefore, various schemes of PLI and RPLI are very popular amongst eligible clients and doing well. There are 250.61 lakhs RPLI policies as on March 31, 2020 with a sum of ₹ 1,35,540.13 crore assured.

PLI offers 6 (six) types of plans: whole life assurance (Surakha); convertible whole life assurance (Suvidha); endowment assurance (Santosh); anticipated endowment assurance (Sumangal); joint life assurance (Yugal Surksha); and children policy (Bal Jiwan Bima).

RPLI also offers 6 (six) types of plans: whole life assurance; convertible whole life assurance (Gram Suvidha); endowment assurance

(Gram Santosh); anticipated endowment assurance (Gram Sumangal); 10 years RPLI (Gram Priya); and children policy (Bal Jiwan Bima).

Estates' Management

The Department of Posts has a universal service obligation to provide basic postal facilities at an affordable price throughout the country. Providing well-designed buildings for post offices, mail and administrative offices which facilitate provision of efficient postal services to the public is an important mandate of the Department. The new infrastructure being constructed are ensuring barrier-free and accessible to persons with disability and following the harmonised guidelines and space standards for barrier-free environment for persons with disability and elderly according to the instructions as contained in Persons with Disablity Act.

Material Management

For postal operation, several items like postal bags, postmen uniform, plastic seals, letter boxes, bar code, etc., are procured by the Department in huge numbers. The manufacturers of these items are largely from Micro, Small and Medium Enterprises Sector. Since 2016, the Department has decentralised the procurement of these items, with standardisation of specification of each item and initiative is being taken to make these items available on Government e-Marketplace by creating a postal bouquet.

New and Value Added Services

Mail Network Optimisation Project

Mail Network Optimisation Project (MNOP) was undertaken by the Department with the objective of consolidation and optimisation of its mail network and with a view to improve quality of mail operations by streamlining core mail operations. The project covers Speed Post, International Mail, registered and unregistered mail. MNOP project has been implemented in the entire country comprising 23 postal circles. It has resulted in benefits to the customers in terms of improved delivery efficiency of Speed Post and increased number of Speed Post and registered articles having end to end tracking (from booking to delivery).

Postman Mobile Application

Postman Mobile Application (PMA) is an android-based mobile application which has been designed and developed in-house by the Center for Excellence in Postal Technology (CEPT), Mysuru. Department of Posts has provided around 50,000 smart phones in urban areas and more than 1 lakh smart phones to the delivery staff in the rural areas for the deployment of PMA. It is being used by the delivery staff both in urban and rural areas for delivering Speed Post/parcels, business parcels, registered post and money orders and for capturing real-time delivery information. Wide spread usage of PMA has enhanced the overall customer experience and the delivery performance.

Speed Post

Speed Post was started in 1986 for providing a time-bound and express delivery of letters and parcels weighing upto 35 kg between specified stations in India. It is the flagship product of Department of Posts and the market leader in the domestic express industry with monthly volumes of more than 3 crore articles. The facility for booking is available in almost all the departmental post offices in the country and is delivered across the country. Speed post articles can be tracked online by using a 13 digit speed post article number through the India Post website (www.indiapost.gov.in) or by sending an SMS. Department of Posts also sends free SMS alert when the article is delivered as well as to addressee when the article arrives for delivery subject to the updation of mobile numbers at the time of booking. Insurance facility up to ₹ 1 lakh is also provided as an add-on service for speed post articles.

Leveraging Post Office Network for Setting up Passport Seva Kendra

The Department is associated with the passport services right from its inception as passports are being delivered through speed post. In order to extend passport services on a larger scale and to ensure wider area coverage, Department of Posts and Ministry of External Affairs have mutually agreed for leveraging the network of post office as Passport Seva Kendras for benefit of citizens.

Electronic Clearance of Letter Boxes

Department has introduced electronic monitoring of the clearance of letter boxes through the Nanyatha software app, which provides a mechanism for checking the clearance of letter boxes.The number of letters posted in a particular letter box is made available in the system.

The members of public can also track the status of letter box clearance in any particular locality by logging on to the web tool, http://appost.in/nanyatha. This step has resulted in ensuring regular clearance of letter boxes thereby improving timely delivery of unregistered mail posted in letter boxes. The e-clearance of letter boxes has been implemented in 2,727 cities/towns across the country covering 29,840 letter boxes.

Express and Business Parcel

The increasing e-Commerce market has given a boost to the parcel segment where B2C parcels are on the rise. At the same time there is a demand to cater to the needs of the C2C category parcels also. Accordingly, Express Parcel and Business Parcel services were introduced by the Department in 2013.

Express Parcel is a premium parcel service available for retail as well as bulk customers, offering time-bound, safe and secure home delivery of parcels. To have minimal transit time these parcels will be given airlift wherever needed. Minimum chargeable weight of Express Parcel is 0.5 kg, maximum chargeable weight for retail customers is 20 kg and for contractual customers it is 35 kg.

Business Parcel aims to provide an economical distribution solution to corporate customers by providing surface transmission of the parcels. Minimum chargeable weight of parcels in this category is 2 kg and maximum weight is 35 kgs. Service is available for all locations in the country.

Cash on Delivery

Increasing trend for online shopping has tremendous business opportunities for payment services, order processing and fulfillment services, etc. In order to cater to these business opportunities and to provide a fast, safe and economical solution of collection of amount of goods at the time of its delivery and its remittance to sender, Cash on Delivery facility was introduced in 2013 and is available to the contractual customers of Express Parcel, Business Parcel and Speed Post.

Logistics Post

Logistics Post was started to provide distribution solutions to the corporate customers and it has created a niche market in providing

express logistics services with a large network in the country. As a part of Supply Chain solution, Full Truck Load (FTL) services; Less Than Truck Load (LTL) services; warehousing services; order processing and fulfillment services; and reverse logistics services are being provided by Department of Posts under Logistics Post. There is no upper weight limit for Logistics Post consignment and the minimum chargeable weight is 50 kg if consignments are sent through surface. In case Logistics Post consignments are sent by air, minimum chargeable weight is 25 kg.

Logistics Post Air service has started from 2013 and links the following 15 cities: Agartala, Delhi, Mumbai, Kolkata, Nagpur, Bengaluru, Hyderabad, Chennai, Pune, Ahmedabad, Imphal, Guwahati, Patna, Lucknow and Thiruvananthapuram.

Road Transport Network during Covid-19

During Covid-19, with the stoppage of rail and air services, mail and parcel transmission had come to a halt for a while. To meet the urgent national requirement at a critical time, a dedicated nationwide Road Transport Network (RTN) for shipment of essential items especially ventilators, Covid-19 Kits, etc., was planned and operationalised by the Department from its existing fleet of vehicles supplemented by outsourced vehicles. Fifty Six national routes connecting 75 important cities were operationalized from April 2020. These national routes involved a daily run of over 25,000 km per day. More than 93 tonnes of essential items were shipped in around 20,000 bags per day during the lockdown.

Business Posts

A lot of pre-mailing activities like folding, inserting, franking, addressing and pasting, etc., are required to be completed before a mail article is posted. Large organisations were finding it difficult to carry out these pre-mailing activities, Department of Posts introduced ‘Business Post’ service in 1996 to offer a comprehensive solution to corporate/government organisations/PSUs and other corporate houses for their pre-mailling requirements. Besides bringing in additional revenue, this activity is meeting the need of corporate and bulk mail customers. Business Post services are available in Business Postal Centres at various major post offices across the country. The services include home/office collection, insertion, sealing, addressing, franking, special handling, etc.

Media Post

India Post offers a unique media concept to help the Indian corporate and the government organisations reach potential customers through Media Post. No other medium can match the sheer expanse of India Post in terms of volume and reach. Media Post offers a range of advertising mediums such as letter boxes, postal stationery, postal premises, etc.

Direct Post

With the increasing commercial activity in the country, the need for direct advertising of products and services by the business organisations is growing. Direct Mail, which can be defined as printed matter usually carrying a sales message or announcement designed to elicit a response from a carefully selected consumer or business market, is the most potent medium for direct advertising. In the advanced countries, Direct Mail now constitutes a predominant portion of mail traffic handled by postal administrations. Direct Mail can be both addressed as well as un-addressed.

Direct Post is the un-addressed component of Direct Mail in India, and would comprise un-addressed postal articles like letters, cards, brochures, questionnaires, pamphlets, samples, promotional items like CDs and cassettes etc., coupons, posters, mailers or any other form of printed communication that is not prohibited by the Indian Post Office Act 1898 or Indian Post Office Rules 1933.

Retail Post

Post Office is being developed as a one-stop shop to provide a range of utility services to the customers providing convenience and affordability at their doorsteps. Retail Post leverages the vast network of post offices and the services under it include collection of electricity bill, telephone bills, taxes, fees, sale of *Rakhi* envelopes, address verification service, sale of application forms of various educational institutions and recruiting agencies, etc.

In order to provide railway tickets through convenient locations, railway reservation tickets of all classes are being sold at the post offices in association with the Ministry of Railways.

Gangajal through Post Offices

India Post has put in place arrangements for supply and distribution of *Gangajal* sourced from Rishikesh and Gangotri, through post offices across the country from 2016. *Gangajal* is being made available through Head Post Offices and ePost Office Portal. Arrangements have also been made for doorstep delivery of *Gangajal* across the country through Speed Post.

PostShoppe

The Department of Posts in its endeavour to facilitate customers with pleasant shopping experience has evolved a concept of 'Post Shoppe'. The 'Post Shoppe' is a convenient store format, located in the premises of important post offices, which essentially keeps wide range of collectable philatelic items such as stamps, first day covers, frames, albums and also 'My Stamp' corner where one can get stamps with own photograph. Apart from these, stationery items of general use such as different varieties of covers/envelopes, CD mailers, etc., are also made available at these shops. Besides, 'Post Shoppes' are also a prominent place for items of cultural heritage and traditional items of local importance prepared by artisans. The 'Post Shoppe' have got elegant looks and modern shelf and rack system with open display method creating an attractive look and giving a pleasant shopping experience.

Presently, more than eighty 'Post Shoppe' are functional across the country and these have been well received and appreciated by the customers with increasing footfalls.

Passenger Reservation System

A Memoradum of Understanding was signed between India Post and Ministry of Railways to provide computerised Passenger Reservation System (PRS) terminals in some post offices. Service was initially started in 30 post offices. Now, this number has gone up to around 337. List of Post Offices opening India Post PRS Centre, along with contact details, is available on the web site www.indiapost.gov.in

Since the commencement of service in 2007, service charges are being realised by the Department for issuing of reserved tickets.

Sovereign Gold Bond

Department is actively engaged in the premier scheme - Sale of Sovereign Gold Bond (SGB) - introduced in 2015-16 by Ministry of

Finance, and operated through RBI. The objective of the scheme is to popularise 'Paper Gold' among masses and to reach out to the small investors at the grassroot level.

Electronic Indian Postal Order (e-lPO)

Based on the proposal received from Department of Personnel and Training (DoPT), India Post agreed to facilitate acceptance of RTI fees from Indian citizens abroad through e-lPO on ePost Office web portal.

The user may purchase an Indian Postal Order electronically by paying a fee online through ePost Office Portal. Payment of fee can be made using debit and credit cards powered by VISA and Master.

Initially this facility was launched in 2013 only for Indian citizens abroad across the globe to seek information from the Central Public Information Officers (CPIOs) under the RTI Act, 2005. Later on, the facility was extended to 176 Indian Missions abroad. e-lPO facility was further extended to Indian citizens living in India in 2014 to facilitate them to pay RTI fee online.

e-Post Office

e-Post Office is an e-commerce portal of the Department of Posts which provides selected postal facility through the internet. This portal aims at providing a convenience to the public for availing select postal services from their home/office using their own computer and internet. Customers can buy philatelic stamps and pay PLI/RPLI premium online using credit/debit card through this portal. The customer would need to register on the website for the first time.

e-Post

e-Post is an unregistered hybrid mail provided for both retail as well as corporate customers providing electronic transmission of messages which may include text messages, scanned images, pictures and their delivery in hard copies at the destination through postman/delivery staff. Presently, e-Post booking facility is available in more than 13,000 post offices and are physically delivered through a network of more than 1.54 lakh post offices, etc., to draft, design and send messages as per their business requirements from their office premises by using the internet. Online recharge facility for pre-paid customers is available using credit/debit card.

e-Payment

It is an option for businesses and organisations to collect their bills or other payments through post offices. e-Payment is a many-to-one-solution which allows collection of money (telephone bills, electricity bills, examination fee, taxes university fee, school fee, etc.) on behalf of any organisation electronically.

International Relations

India is a member of the Universal Postal Union (UPU) since 1876. This organisation of 192 member countries aims to extend, facilitate and improve postal relations among other countries. India, an elected member of the Postal Operations Council (POC), the UPU, is the co-chair of Committee 1 (Supply Chain Integration), and member of the Quality of Service Fund, Board of Trustees (QSF BoT) which works for development of the postal sector in the developing countries.

India is also a member of the Asian-Pacific Postal Union (APPU) along with 31 other member countries. The purpose of the APPU is to extend, facilitate and improve closer postal relations among member countries and to promote cooperation in the field of postal services within the Asia-Pacific region.

Philately

Philately is the hobby of collecting stamps as well as the study of postal history and other related items. It is a mode of commemorating, celebrating and promoting national heritage, culture, events and personalities. Postage stamps are pictorial ambassadors. They are a statement of sovereignty of a nation.

After independence, the medium of postage stamps was initially used to highlight the country's achievements in science and technology as well as its socio-economic development by depicting themes like Five Year Plans, steel plants, dams, etc. Subsequently, the country's rich cultural and natural heritage came to be showcased and many beautiful stamps were issued in thematic sets on art, architecture, crafts maritime heritage, science, technology, defence, and cinema. Great leaders of national and international standing have also been honoured with commemorative stamps, the most important being Mahatma Gandhi. The Father of the

Nation has been honoured with commemorative as well as definitive stamps. Personalities of repute in areas like painting, literature, science, music, social upliftment, etc., have also been portrayed on commemorative stamps.

In keeping with their dual character as a 'Token of Postage[1] and as 'Cultural Ambassador', there are two categories of stamps, viz., definitive and commemorative postage stamps. The definitive postage stamps are meant for day-to-day use as a token of payment of postage on mail articles. These incorporate less complicated design inputs, entailing minimum expenditure in their manufacture, and are printed in large quantities, over longer periods. On the other hand the commemorative postage stamps are designed and printed with greater aesthetic inputs. These are manufactured in limited quantities and generate great interest among philatelists and collectors.

The philatelic activities of the Department include: designing, printing, distribution and sale of commemorative postage stamps through philatelic bureaux and counters, e-post office, etc., designing, printing and distribution of definitive postage stamps and items of postal stationery like envelopes, Inland letter card, postcard, aerogram, registered cover, etc., promotion of philately and conduct and monitoring of philatelic exhibitions; maintenance of the National Philatelic Museum, Dak Bhawan, New Delhi.

A Philatelic Advisory Committee (PAC) advises the Government of India on the annual programme for issue of commemorative stamps. It is an important forum for citizen-government interface where persons who have achieved eminence in various fields can contribute to the process of identifying and highlighting issues or events, institutions, personalities and themes whose commemoration through postage stamps would help elevate the image of India in the global arena.

Release of Stamps

In all, 33 issues consisting of 118 stamps were released during the period April 2019 to March 2020 commemorating various personalities, events/ occasions. Some of the innovative issues were: 550th Birth Anniversary of Guru Nanak Dev ji, Constitution of India and 150th Birth Anniversary of Mahatma Gandhi. Thematic Stamps were also released on

Embroideries of India, Indian Fashion (Series IV) and UNESCO World Heritage Sites in India (Series II).

My Stamps

My Stamps are personalised sheets of postage stamps of India Post. Personalisation is achieved by printing a thumb nail photograph image of the customer and logos of institutions, or images of artwork, heritage buildings, famous tourist places, historical cities, wildlife, other animals and birds, etc., alongside the selected commemorative postage stamp.

Personalised 'My Stamp'

Personalised 'My Stamp' is a personalised sheet of postage stamps. Alongside these personalised theme stamps, customers may opt for printing of their own, parents, family, etc., pictures to be printed. Some of the themes of Personalised My Stamps are Taj Mahal, Hawa Mahal, Mysore Palace, Indian Army, rose, happy anniversary, Vaishno Devi, etc.

Customised 'My Stamps'

Customised 'My Stamps' is a customised sheet of postage stamps wherein corporates organisations and institutions can get customised sheets printed from India Post. Alongside these customised themed stamps, organisations may opt for printing of their logo and images of their organisation/institute.

Celebration of 150* Birth Anniversary of Mahatma Gandhi

Eighty-seven postal administrations across the world released stamps to mark the 150th Birth Anniversary of Mahatma Gandhi by August 2020.

Printing of Innovative Stamps

A set of seven Circular Commemorative Postage Stamps was issued to mark the commencement of the 150th Birth Anniversary celebrations of Mahatma Gandhi. For the first time in the history of independent India, circular stamps were issued. In a first, a uniquely designed miniature sheet was issued on Hockey World Cup held at Bhubaneshwar, other than the usual rectangular and square shaped miniature sheets. The objective was to not only celebrate the spirit of hockey but also to attract the youth to the fold of philately. Another innovative Miniature Sheet was issued on the hill forts of Rajasthan in the shape of the logo of UNESCO as these hill forts are UNESCO World Heritage sites.

Crowd-sourcing of Stamp Designs

The Department has been organising stamp design competitions for designing postage stamps on ”people-centric themes”. These competitions have been eliciting huge response from people all over the country.

Deen Dayal SPARSH Yojana

A philately scholarship scheme called Deen Dayal SPARSH (Scholarship for Promotion of Aptitude and Research in Stamps as a Hobby) Yojana was introduced in 2017-18 to promote philately among children at a young age in a sustainable manner that can reinforce and supplement the academic curriculum in addition to providing a hobby that can help them relax and de-stress. Under this scheme, 920 scholarships are awarded throughout the country to students from Classes VI, VII, VIII and IX every year.

'Dhai Akhar' Letter Writing Competition

A nationwide letter writing competition—Dhai Akhar was introduced in 2017-18 to encourage and promote letter writing. Top three entries in each category (total 4 categories) are awarded at the national level. The theme for 2018-19 for this campaign was ”Letter to my Motherland” inspired by the popular Tagore song ”Amar Desher Mati...”. The theme for 2019-20 was ”Dear Bapu, you are immortal...” inspired by Albert Einstein's homage to Mahatma Gandhi ”Generations to come will scarce believe that such a one as this ever in flesh and blood walked upon this earth”.

Training Activities

Department of Posts has framed the Postal Training Policy, 2012, in conformity with the National Training Policy, 2012, of Government of India. The key objective of this policy is ”Training for All”. Training programmes are available at the entry level (induction training) and there are three Mid-career Training Programmes at specific intervals for all cadres/categories of staff.

The Department has well established training infrastructure. The following training institutes take care of training needs of the Department: Rafi Ahmed Kidwai National Postal Academy (RAKNPA) at

Ghaziabad is the apex training institute of the Department recognized by the DoPT as a Central Training Institute for higher managerial cadres. This imparts induction as well as in-service training to the officers of Indian Postal Service and other managerial cadres of India Post. It also imparts training to managers of foreign postal administrations and officers of various central government departments and PSUs, in areas of common interest. The Academy conducts Executive Development Programme (EDP), Management Development Programme (MDP) and Advanced Development Program (ADP) for the officers of Indian Postal Service.

Postal Training Centres (PTCs) are functioning at Darbhanga, Guwahati, Madurai, Mysuru, Saharanpur and Vadodara for training operative staff and inspectorial cadres. Besides, these also organise other specialised training programmes. These six training centres have well-equipped computer labs, classrooms and hostel facilities to take care of the bulk of the training needs of operative staff of the Department.

Public Grievances

Computerised Customer Care Centres

The Department has a well laid out procedure for handling public grievances for its services. A monitoring mechanism to ensure the quality of services and prompt redressal of public grievances is in place.

The Department has upgraded its web-based grievance handling system to interconnect the Customer Care Centres with the objective of systematic handling and quick redressal of public grievances. In 2010, the modified version of Computerised Customer Care Centre (CCCC) software was made operational. New features, such as automatic generation of acknowledgement; escalation of unresolved complaints to next higher administrative level for better monitoring and quicker redressal; differentiation of complaints into minor, major or critical; automatic generation of reply to the complainant on completion of inquiry; provision for feedback of complainant; etc., were also incorporated.

Presently, 19,201 CCCC have been established in the post offices, sorting hubs, speed post centres and divisional/regional/circle headquarters across the country for online exchange of information

amongst all the units for speedy redressal of public grievances. The network covers all head post offices in the country with the objective of providing easy and speedy access to information and help required by the customers, apart from the redressal of grievances.

Social Media Cell

Social Media Cell is an independent entity and deals with the Twitter and Facebook accounts of the Department of Posts. The social media complaints are time-bound and are replied within 24 hours. The social media cell monitors the complaints sent to all the circles on a daily basis.

India Post Help Centre

In the wake of the initiatives taken up by the government to bring transparency and accountability, Department of Posts has established ”India Post Call Centre” (IPCC) with Interactive Voice Response System (IVRS) at Varanasi in 2018. Such call centres aim to assist the general public in the following manner: redressal of public grievances and dissemination of information regarding various initiatives, activities, schemes, programmes and projects undertaken.

Indian Post Office Rules

Indian Post Office Rules 2019 are to be issued which will be in supersession of IPO Rules, 1933. The Indian Post Office Rules, 2019, will be a new set of rules which will govern the functioning of the post offices in the present environment. These will enable better administration of the postal services leading to increased customer satisfaction. This exercise, which has been carried out after nearly 76 years, is also in synchronisation with the government’s objective of updating the rules and regulations to make them relevant to the present working scenario.

Digital Life Certificate

Jeevan Pramaan/Digital Life Certificate (DLC) is a biometric enabled digital service for pensioners for submitting their Life Certificates digitally, which was introduced in 2015 as a Digital India initiative of Government of India. In this service, all life certificates submitted manually by the pensioners are now being submitted digitally by using Aadhaar number. These Jeevan Pramaan Centres are functioning in all the 810 Head Post Offices across the country.

Information Technology

Ministry of Electronics and Information Technology (MeitY) deals with policy matters relating to information technology, electronics, internet (other than licensing of Internet Service Providers-ISPs) and cyber security. The aim is to promote e-governance for empowering citizens; promoting the inclusive and sustainable growth of the electronics; IT and ITeS industries, promoting digital transactions and digital payments; enhancing India's role in internet governance; adopting a multipronged approach that includes development of human resources; promoting R&D and innovation; enhancing efficiency through digital services; and ensuring a secure cyber space.

With the unveiling of the Digital India programme the role of MeitY has enhanced. The overarching vision of the programme is to transform India into a digitally empowered society and knowledge economy. The programme has three vision areas, namely, digital infrastructure as a utility for every citizen, governance and services on demand and digital empowerment of citizens by bridging the digital divide in the country. This transformational programme is designed to build holistic capabilities across infrastructure, manufacturing, skills and delivery platforms which in turn will lead to creation of a self-reliant knowledge economy. Digital infrastructure as a utility includes availability of high speed internet for delivery of services to citizens; digital identity for every citizen; mobile phone and bank account enabling citizen participation in digital and financial space; shareable private space on a public cloud; and safe and secure cyber-space.

Governance and services on demand includes seamlessly integrated services across departments or jurisdictions, services availability in real time from online and mobile platforms, digitally transformed services for improving ease of doing business, leveraging GIS for decision support systems and development.

Digital empowerment of citizens includes universal digital literacy, accessible digital resources universally, all documents/certificates to be available on cloud, availability of digital resources/services in Indian languages and portability of all entitlements through cloud.

The nine pillars of growth, viz., broadband highways; universal access to mobile connectivity; public internet access programme; e-governance —reforming government through technology; e-kranti electronic delivery of services; information for all; electronics manufacturing; IT for jobs; and early harvest programmes, are being promoted under Digital India programme. The programme is coordinated by this Ministry with the ministries and departments in the central and state governments partnering it in their respective domain areas.

MeitY functions around the ambit of two major Acts. The Information Technology Act, 2000 which provides legal recognition to the transaction carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as electronic commerce which involves the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the government agencies. It gives provisions for the use of electronic records and digital signature with the provision of authentication and security. It also directs the establishment of Cyber Appellate Tribunal. This Act was amended through the Information Technology (Amendment) Act, 2008, which substituted the word ”digital signature” with ”electronic signature” with major changes in various sections along with insertion of other sections.

To ensure that various benefits and subsidies reach the targeted beneficiaries, the government made all efforts to leverage the Aadhaar platform. The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 provides for good governance, efficient, transparent and targeted delivery of subsidies, benefits and services, the expenditure for this is incurred from the Consolidated Fund of India, to individuals residing in India through assigning of a unique identity number to such individuals. It covers everything from the enrollment for Aadhaar number, authentication to establishment of UIDAI which has now become a statutory organisation.

Website: www.meity.gov.in

Digital Identity

Aadhaar provides 12 digit biometric and demographic based identity that is unique, lifelong, online and authenticable. Under the Aadhaar Act 2016, UIDAI is responsible for Aadhaar enrolment and authentication,

including operation and management of all stages of Aadhaar life cycle; developing the policy, procedure and system for issuing Aadhaar numbers to individuals and perform authentication; and also to ensure the security of identity information and authentication records of individuals. More than 116 crore Aadhaar numbers have been generated. Aadhaar has been instrumental in the provision of goods and services and is also enhancing and enabling digital transaction and digital payment. Some of major initiatives are:

Aadhaar Enabled Payments: (i) Aadhaar Payment Bridge (APB): A payment can be made to a person's bank account via his/her Aadhaar number, provided it is linked to his/her Aadhaar number. Government of India transfers benefits and subsidies directly to the beneficiaries' bank account through APB. (ii) Aadhaar Enabled Payment System (AEPS): AEPS is the platform in which a person can do basic banking transactions including withdrawal, deposit cash, fund transfer, etc., from his/her bank account at Micro-ATMs using biometric authentication. Bank is chosen by resident as it is a resident present transaction; (iii) Aadhaar Pay: It is merchant version of AEPS. The Application works on a low cost android phone with single finger biometric device. It enables merchant to take cashless payment from his customers. It was launched in 2017; (iv) Pay to Aadhaar: It is a facility available on UPI platform integrated in BHIM app. It enables Person-to-Person (P2P) remittance using Aadhaar number of the recipient as financial address. The receiving Aadhaar number should be linked with his/her Aadhaar number. This was also launched in 2017.

Aadhaar Enabled Services: (i) targeted delivery of foodgrains under PDS: Over 18.05 crore ration card holders receive ration post Aadhaar authentication. They are sure that nobody else can claim their rations, reducing pilferage and theft in the process. Aadhaar seeding for de-duplications and other DBT processes has removed over 2.33 crore fake ration cards; (ii) PAHAL and Ujjwala Scheme: Over 15.12 crore LPG beneficiaries received LPG subsidy in their bank accounts under the PAHAL scheme. Over 2.5 crore connections were issued to BPL women under Ujjwala Scheme; (iii) ease of opening of bank account using e-KYC: Aadhaar has enabled this by becoming the single document which acts as KYC document for opening a bank account; (iv) e-verification of Income Tax Return: Aadhaar has enabled income tax payer to e-verify

their Income Tax Return using Aadhaar OTP authentication, obviating the need for sending the ITR-5 in a physical form to Income Tax Authorities.

e-Governance

With the advent of Digital India as an apex programme, various new policy initiatives have been taken up by MeitY such as eKranti, policy on adoption of open source software in e-governance systems; e-mail policy; policy on use of IT resources; policy on collaborative application development by opening the source code of government applications; application development and re-engineering guidelines for cloud ready applications and e-governance competency framework. Major schemes such as e-districts, common service centres and state wide area network (SWAN) have also been working in this direction.

Policy on Adoption of Open Source Software: It encourages the formal adoption and use of Open Source Software (OSS) in government organisations. Accordingly government organisations, while implementing e-governance applications and systems, are to ensure compliance of this policy and decide by comparing both OSS and Closed Source Software (CSS) options with respect to capability, strategic control, scalability, security, life-time costs and support requirements.

Policy on Collaborative Application Development by Opening the Source Code of Government Applications: This policy aims to increase the pace of e-governance application development and rapid roll out/implementation by adopting an open-source code, for high quality e-governance applications. It also intends to encourage innovative e-governance applications and solutions through collaborative development.

Policy on use of IT Resources: This policy governs the usage of IT resources from an end user's perspective. Its objective is to ensure proper access to and usage of government's IT resources and prevent their misuse.

e-mail Policy of Government: This policy lays down the guidelines with respect to use of e-mail services of the government and employees of those state/ UT governments that use the e-mail services of GOI and also those state/UT governments that choose to adopt this policy in future. The objective is to ensure secure access and usage of Government of India e-mail services by its users.

Policy on Open Application Programming Interfaces (APIs): The Policy on Open APIs for government's approach on the use to Open APIs is to promote software interoperability for all e-governance applications and systems and provide access to data and services for promoting participation of all stakeholders including citizens.

The e-Governance Competency Framework (e-GCF): Its toolkit contains a set of end-user knowledge areas required for government employees. The objective of the framework is to strengthen the capacity building scheme to identify and define competencies, through a competency-based system which is required for different job roles under e-governance.

In order to transform the quality of services and to provide integrated services the e-Kranti initiative aims to utilise emerging technologies such as cloud and mobile platform and focus on integration of services. The principle of this programme is 'transformation' and not translation, and to provide integrated services and not individual ones. Another important initiative pertains to 'Jeevan Praman', that is, of providing an Aadhaar based digital life certificate for pensioners.

National Scholarship Portal has been developed as a one-stop solution to implement end-to-end disbursement of the scholarship to the beneficiaries. The process includes student registration, application, approval and disbursement. Over 1.21 crore applictions have been submitted. There are 52 registered schemes from eight ministries/departments.

In order to integrate the delivery of government services (across various departments), an initiative called Mobile Seva has been launched. A portal called 'Vikaspedia' to provide information on health, education, agriculture, energy, social welfare and e-Governance has been developed in more than 15 languages and more languages are being added.

MyGov.in is an innovative platform launched to ensure citizens' engagement in decision making by the government so that the ultimate goal of "Good Governance" for building India is achieved. This initiative is an opportunity for citizens and well-wishers from across the world to share their views on key issues directly with the Prime Minister of India.

MeitY has developed Rapid Assessment System (RAS) for continuous feedback for e-services delivered by the Government of India and state

governments. This system has multiple channels for receiving feedback and is backed by analytics. These analytics will help integrated departments for continuous system improvement and better governance.

e-Sampark Database is developed to send messages and emails to public representatives and government employees. This database has 1.90 crore email addresses and over 82 crore mobile numbers. The count of mailers is over 301 crore for 563 campaigns.

e-Taal is a web portal for dissemination of e-transactions statistics of national and state level e-governance projects including mission mode projects. It receives transaction statistics from web based applications periodically on near real time basis. e-Taal presents quick analysis of transaction counts in tabular and graphical form to give quick view of transactions done by various e-governance projects.

Aadhaar-Enabled Biometric Attendance System (AEBS): In order to bring in efficiency in the government, an Aadhaar enabled Biometric Attendance System was implemented by MeitY.

e-Payment Framework: All payments and receipts to be in electronic mode. The portal payonline.gov.in envisaged as a common platform for making physical payments online.

e-Districts: It is one of the Mission Mode Projects (MMPs) under e-Kranti, with the MeitY, as the nodal ministry, to be implemented by state government or their designated agencies. This MMP aims at electronic delivery of identified high volume citizen centric services, at district and sub-district level, those are not part of any other MMP. It has been launched in 634 districts along with 1012 e-services.

Common Service Centres (CSCs): This scheme aims at providing ICT enabled front-end service delivery outlets, across rural India, covering six lakh villages. These internet-enabled centres allow doorstep access to citizens, private and social services for skill development, education, digital literacy, health and financial services. New services namely banking, insurance and pension under Prime Minister Jan Dhan Yojana have made CSCs very vibrant. Digital Sakshartha Abhiyan (DISHA) for undertaking digital literacy has enabled active citizen participation through CSCs. Aadhaar enrolment/update has been enabled through CSCs. In all, 3,00,774 Common Service Centres have been registered

across the country, among which, 1,96,922 are at Gram Panchayat level till August 2017.

State Wide Area Network (SWAN): SWAN has been identified as an element of the core infrastructure for supporting the e-governance initiatives and the MeitY has earmarked a significant outlay for supporting this activity. Under the National e-Governance Action Plan, it is proposed to extend connectivity to the block level through NICNET/State Wide Area Network (SWAN). It is operational in 34 states/UTs and average bandwidth utilization is more than 60 per cent.

Capacity Building Scheme II (CB Scheme II): Under the National e-Governance Plan, MeitY, Government of India has approved the Capacity Building Scheme Phase II, to give impetus in building capacities within the government by adapting a harmonised and synchronised approach, to ensure the availability of right skills. The core objective of the Capacity Building Scheme Phase II is to build capacities in central line ministries and state/UT line departments for implementation of various e-Governance initiatives. This is to enhance the abilities of the project teams, to have a holistic understanding on visualising, conceiving and delivering projects.

Gl Cloud: In order to utilise and harness the benefits of Cloud Computing, the government has embarked upon an ambitious and important initiative Gl Cloud which has been coined as MeghRaj. The focus of this initiative is to evolve a strategy and implement various components including governance mechanism to ensure proliferation of Cloud in the government. Formulation of the Cloud Policy is one of the primary steps that will facilitate large scale adoption of cloud by government.

National Centre for Geo-lnformatics (NCoG) provides GIS-based services to government ministries/departments. NCoG is currently involved in rolling out select GIS-based decision support system for various organisations. Base map layers for administrative boundaries up to village level, major roads, rivers, rail on the scale of 1:10,000 across India have been completed. GIS-based Decision Support System (DSS) platforms have been developed. So far, 21 applications across various domains are operational.

Promotion of Digital Transactions

Promotion of a digital payments ecosystem is a natural extension of the Digital India programme and has the potential to transform the economy by formalisation of financial transactions. Digital payments allow for services to be delivered at a lower cost, afford greater scalability and enable small and micro enterprises to access formal financial services and benefits of e-commerce. A new educational channel ”DigiShala” for creating awareness regarding various forms of electronic payment to citizens was launched in 2016. DigiShala is now also available on Dish TV in addition to DD Free Dish. The DigiShala is an education and non-commercial TV channel on DD Free Dish.

The new website www.cashlessindia.gov.in was launched in 2016 to serve as a knowledge repository providing information on different types of digital payment methods, schemes to create awareness among citizens.

The BHIM App was launched in 2016 and within a short span BHIM downloads have crossed 20 million with transactions worth around ₹ 3,000 crores. For promotion of BHIM app at merchant end, Aadhaar Pay under new name ‘BHIM Aadhaar’ was also launched in 2017. A mission has been created under the name ‘Digidhan Mission’ for creation of ecosystem for promotion of digital payments and transactions.

National Policy on Universal Electronic Accessibility (2013) was formulated to break the barriers faced by differently abled persons by ensuring easy accessibility of electronics and ICT. Electronics and ICT can mitigate the barriers faced by differently abled persons as well as help them to participate independently in day-to-day life. The National Policy on Electronic Accessibility recognises the need to eliminate discrimination on the basis of disabilities and to facilitate equal access to Electronics and ICT. It recognises the diversity of differentlyabled persons and provides for their specific needs.

e-Pramaan

MeitY has conceptualised and is implementing the e-Pramaan framework for e-Authentication for public services. The objective is to electronically deliver the government services to its intended recipients in a secure manner, as well as to build citizens’ trust in an online environment, which is always prone to identity thefts and other associated risks. MeitY has made e-Pramaan available for public usage with the help of C-DAC, Mumbai. e-Pramaan is a centralised, standard

based strong multi-factored authentication system which provides four factors for user authentication: password (text, image), one time password (SMS, email, mobile app), digital certificate (Indian CAs), and biometric (finger print, IRIS). The major features of e-Pramaan are: single sign on (SAML 2.0 based); support in Java; Dot Net and PHP; seamless upgradation to new technology; two-way authentication; flexible authentication chaining; role based authorization; secured communication channel; etc. Various workshops were organised to create awareness about e-Pramaan. At present, 105 services are integrated and using e-Pramaan for authentication. Another major component of e-Pramaan is the Aadhaar Ecosystem. C-DAC Mumbai is ASA/KSA-AUA/KUA of UIDAI to provide Aadhaar services.

Online e-Sign (e-Hastakshar)

One of the initiatives taken under Digital India Programme is to provide non-repudiable authentication of applicant's identity through a facility called 'e-Sign'. This facility is an online digital signature service. e-Sign was formally launched in 2015. It is an online electronic signature service, which can be integrated with service delivery applications via an Application Programming Interface (API) to facilitate an e-Sign user to digitally sign a document. Using authentication of the Aadhaar holder through Aadhaar e-KYC service, online electronic signature service is facilitated. e-Sign service facilitates instant signing of documents online by citizens in a legally acceptable form.

State Data Centre

State Data Centre (SDC) is one of the three core infrastructure components under the NeGP. Under the scheme, data centres are to be established in all the states/UTs to consolidate services, applications and infrastructure in order to provide efficient electronic delivery of Government to Government (G2G), Government to Citizen (G2C) and Government to Business (G2B) services. These services can be rendered by the states through common service delivery platforms seamlessly supported by core connectivity infrastructure, such as, SWAN and CSCs as the front-end delivery outlets at the village level. Some of the key functionalities that can be provided through SDCs are central repository for the state; secure data storage; online delivery of services; citizen information/ services portal; State Intranet Portal; disaster recovery;

remote management; and service integration. SDCs also provide better operation and management control with minimised overall cost of data management, IT resource management, deployment and other costs for states/UTs.

e-Sangam

National Service Delivery Gateway (NSDG) is a middleware infrastructure, being implemented by C-DAC Mumbai, acting as a standard based routing and message switch, which provides seamless interoperability and exchange of data across heterogeneous applications of geographically dispersed departments. e-Sangam also includes the National Services Directory.

National Knowledge Network

National Knowledge Network (NKN) was established in 2010. The objective of the NKN is to interconnect all institutions of higher learning and research with a high speed data communication network to facilitate knowledge sharing and collaborative research.

Since its establishment, the NKN has developed progressively to ensure that Indian researchers excel and also lead international and global collaboration. NKN is the largest network of its kind in the world and is currently perceived as a leading research and education network (REN) globally. NKN is the only network globally, that carries research and evaluation, Internet and e-Governance traffic as three independent verticals under one umbrella. NKN facilitates Digital India, as it is the backbone for all e-Governance initiatives in the country. In addition to educational institutes, NKN connects all SDCs (State Data Centres), NDCs (National Data Centres), ministries and departments across the government.

Mobile Seva Platform

MeitY has initiated a massive countrywide initiative on mobile governance, being implemented by C-DAC Mumbai, to provide government services to the people through mobile phones/devices. As a part of this initiative, the Framework for Mobile Governance was notified in 2012. Mobile Seva enables the integration of the mobile platform with the common e-Governance infrastructure consisting of SDCs, SWANs and SSDG/NSDG. It enables a government department to

integrate both web and mobile based services seamlessly and enhances the access to electronic services tremendously due to the very high penetration of mobile phones, especially in rural areas.

UMANG

Unified Mobile Application for New-Age Governance (UMANG) has been developed and launched in 2017 as a single mobile platform to deliver major government services. UMANG's core platform is integrated with Aadhaar, DigiLocker, PayGov, Rapid Assessment System (RAS), etc. Citizens can access pan-India government services from the central government, state governments, local bodies and their agencies. It supports 12 Indian languages, in addition to English and has been hosted on cloud. UMANG aims to bring power to the fingertips of citizens.

Digital Locker

Digital Locker is a key initiative under Digital India, the Government of India's flagship programme, aimed at transforming India into a digitally empowered society and knowledge economy. Targeted at the idea of paperless governance, Digital Locker is a platform for issuance and verification of documents and certificates in a digital way, thus eliminating the use of physical documents. Indian residents, who sign up for a DigiLocker account, get a dedicated cloud storage space. Organisations that are registered with Digital Locker can push electronic copies of documents and certificates (e.g. driving license, school certificates) directly into citizens' lockers. Citizens can also upload scanned copies of their legacy documents in their accounts. These legacy documents can be electronically signed using the eSign facility.

Smart Virtual Classroom Facility

The objective of the project Smart Virtual Classroom (SVC) was to setup smart virtual classroom facilities in 3,204 government owned/controlled schools plus 50 District Institutes for Education and Training (DIET) in seven pilot states of Himachal Pradesh, Gujarat, Rajasthan, Tripura, Haryana, Andhra Pradesh and Tamil Nadu. The focus is to improve the quality of education for students from remote/rural part of the country. Also, a centralised control system was established in Delhi at ERNET's data centre which hosted the MCU, streaming/recording server and other associated component for multiparty audio/video interaction and also offline access of classroom

sessions round the clock for learning/collaboration between all the stakeholders. The basic aim of the SVC project was to create technology enhanced classrooms that will foster opportunities for teaching and learning by integrating learning technology, such as, computers, electronic white boards, projectors, specialised software, interactive audio-video systems, etc.

Open Government Data

The Open Government Data (OGD) Platform India (https://data.gov.in) has been set up by the National Informatics Centre (NIC) in compliance with the National Data Sharing and Accessibility Policy (NDSAP). The objective is to provide proactive access to government owned shareable data along with its usage information in open/machine readable format, through a wide area of network across the country, in a periodically updated manner, within the framework of various related policies, rules, and acts of the government.

e-Hospital Project

As part of the Digital India initiative, NIC has developed the e-Hospital, e-Blood Bank and Online Registration System (ORS) applications. ORS is the patient interface of e-Hospital for citizens to book online appointment for the hospitals. It is accessible over the internet and is a system to link hospitals across the country for online appointment and providing patient centric services like viewing lab reports, checking blood availability status, etc.

PRAGATI

PRAGATI (Pro-Active Governance And Timely Implementation) as a part of Digital India programme, e-Governance Reforming Government through Technology, was launched in 2015. This video conferencing facility brings the Secretaries to Government of India and the Chief Secretaries of the states on single platform on every fourth Wednesday of the month, through which the Prime Minister is able to discuss the issues in major projects and programmes with the concerned central and state officials directly with full information and latest visuals of the ground-level situation. This enables faster implementation of the central level schemes/projects, state level projects and resolution of grievances between state and central level departments.

Digitise India Platform

Digitise India Platform (DIP) is an initiative of the Government of India under the Digital India Programme to provide digitisation services for scanned document images or physical documents for any organisation. The aim is to digitise and make usable all the existing content in different formats and media, languages, and create data extracts for document management, IT applications and records management. This platform was launched in 2015 under Digital India. The main objective of this project to provide an end-to-end workflow-based IT framework for digitisation of government records to enhance service delivery to the citizen and to empower numerous self-identified volunteers, part-time workers, housewives, students and general public, who add small portions of their contribution through crowdsourcing mechanism to achieve the greater result.

Direct Benefit Transfer

The Direct Benefit Transfer (DBT) programme envisages a switch from the present electronic transfer to bank accounts of the beneficiary to transfer of benefits directly to Aadhaar seeded bank accounts of the beneficiaries. The scheme is being headed by DBT Mission. Under the DBT Mission, DBT Cell is to be constituted in each ministry.

e-Way Bill

e-Way Bill Application provides a self-service platform to taxpayers and transporters to generate single e-Way Bill for movement of goods from one place to another, as per GST Rules. Following implementation of GST, a need was felt to further improve the trade facilitation as well as to strengthen the existing tax collection measures. In order to fulfill these objectives, the e-Way Bill system was rolled out all over the country.

Cyber Security

Millions of people in the country (both in rural and urban areas) rely on the services and information available in the cyber space. As the quantity and value of electronic information has increased, so too have the business models and efforts of criminals and other adversaries who have embraced cyber space as a more convenient and prof itable way of carrying out their activities anonymously. Hence, security of cyber space has become an important part of the national agenda.

Considering its vital importance, a National Cyber Security Policy, 2013 was put in place. It is aimed at building a secure and resilient cyber space for citizens, businesses and government, by way of actions to protect information and information infrastructure in cyber space; build capabilities to prevent and respond to cyber threats; reduce vulnerabilities; and minimise damage from cyber incidents through a combination of institutional structures, people, processes, technology and cooperation.

National Cyber Co-ordination Centre (NCCC) is being set-up with an aim to generate cyber security situational awareness to anticipate and prepare for cyber attacks. NCCC will aggregate cyber threat related information from various identified sources in the country for near real time threat assessment and situational awareness that will help in analysis and generation of timely alerts and periodic reports. This initiative is expected to help in securing the cyber space and strengthening the cyber security posture in the country by leveraging the expertise of people, deploying standard processes and sharing of resources.

Cyber Swachhta Kendra: Indian Computer Emergency Response Team (CERT-ln) has launched a Cyber Swachhta Kendra (Botnet Cleaning and Malware Analysis Centre). This centre is providing detection of malicious programmes and free tools to remove the same for banks as well as common users.

Unique Identification Authority of India

The Unique Identification Authority of India (UIDAI) was established in 2009, as an attached office to the Planning Commission now an attached office of Ministry of Electronics and IT with a vision, ”To empower residents of India with a unique identity and a digital platform to authenticate anytime, anywhere”. A key objective of Aadhaar programme is to provide an identity infrastructure for delivery of various social welfare programmes and for effective targeting of welfare services. The potential of Aadhaar can be realised through its use of the infrastructure as an ID proof and as a unique key by various state departments, central ministries, PSUs, and private sector entities to provide service delivery to residents in an integrated fashion.

In order to carry forward the programmes and schemes there are various organisations which come under the jurisdiction of MeitY and these are given here.

Controller of Certifying Authorities

Digital Signature Certificates (DSCs) are issued by Certifying Authorities (CA) who have been licensed by the Controller of Certifying Authorities (CCA). The Office of CCA empanels licensed CAs for offering e-Sign services for which the legal framework and guidelines are already in place. So far, three of the eight licensed CAs have been empanelled for providing e-Sign service. These e-Sign Service Providers (ESP) are expected to facilitate digital signing for Aadhaar holders only on the basis of their e-KYC from UIDAI.

Website : www.cca.gov.in

Cyber Appellate Tribunal

In accordance with the provision contained under Section 48(1) of the IT Act 2000, the Cyber Regulations Appellate Tribunal (CRAT) was established in 2006. As per the IT Act, any person aggrieved by an order made by the Controller of Certifying Authorities or by an Adjudicating Officer under the Act can appeal before the Cyber Appellate Tribunal (CAT).

Centre for Materials for Electronics Technology

Centre for Materials for Electronics Technology (C-MET) was set up as a registered scientific society in 1990 under the Department of Electronics (now Ministry of Electronics and Information Technology) as a unique concept for development of viable technologies in the area of materials mainly for electronics. C-MET is operating through its laboratories situated at Pune, Hyderabad and Thrissur. The activities at the three labs have specific mandate within the ambit of electronic materials with the concept of bringing out technologies from lab level to pilot plant demonstration ready for Indian industries to take off.

Education and Research Network

Education and Research Network (ERNET): India is an autonomous scientific society of the Ministry. ERNET has made significant contribution for the emergence of networking in the country. In addition to providing connectivity, ERNET has been meeting the needs of

academic and research institutions by providing IT consultancy, project management and training.

National e-Governance Division

To meet ever-growing demand of e-governance across the nation, National e-Governance Division (NeGD) was established as amalgamation of experts from the private sector and the government. NeGD has been playing a pivotal role in discharging the key tasks including programme management and technical support of various components of the Digital India Programme.

National Informatics Centre

National Informatics Centre (NIC) was established in 1976, and has since emerged as a ”prime builder” of e-government/e-governance applications up to the grassroot level as well as a promoter of digital opportunities for sustainable development. NIC, through its ICT network, ”NICNET”, has institutional linkages with all the ministries/departments of the central government, 36 state governments/ union territories, and about 650+ district administrations of India. NIC has been instrumental in steering e-government/e-governance applications in government ministries/departments at the centre, states, districts and blocks, facilitating improvement in government services, wider transparency, promoting decentralised planning and management.

Website: www.nic.in

Standardisation, Testing and Quality Certification

Standardisation, Testing, Quality and Certification (STQC) Directorate is an attached office of this Ministry providing quality assurance services in the area of electronics and information technology (IT) through countrywide network of laboratories and centre(s). The services include testing, calibration, IT and e-governance, training and certification to public and private organisations.

National Internet Exchange of India

NIXI is a not-for-profit organisation set up under Section 25 of the Companies Act, 1956 (now Section 8 under Companies Act, 2013) for peering of ISPs among themselves and routing the domestic traffic within the country. NIXI is performing the following three activities: (i)

internet exchanges; (ii) IN registry and internationalised domain names (IDNs); and (iii) National Internet Registry (NIR).

National Institute of Electronics and Information Technology

National Institute of Electronics and Information Technology (NIELIT), a scientific society of the MeitY, is actively engaged in capacity building and skill development in Information Technology (IT); electronics; communication technologies; hardware; cyber law; cyber security; IPR; GIS; cloud computing; ESDM; e-waste; loT; e-governance and related verticals. NIELIT offers courses both in the formal as well as the non-formal and is also the preferred agency for many state governments for rolling out IT literacy programmes for its employees and the masses.

Software Technology Parks

Software Technology Parks of India (STPI) was set up in 1991 as an autonomous society under the MeitY. STPI's main objective has been the promotion of software exports from the country. It acts as single-window in providing services to the software exporters. STPI is responsible for implementation of the Software Technology Parks (STP) scheme and the Electronics Hardware Technology Parks (EHTP) scheme.

Media Lab Asia

Media Lab Asia has been promoted by this Ministry as a not-for-profit company. The objective of the company was set to bring the benefits of ICT to the common man. The functional activity includes application areas such as ICT for healthcare, education, livelihood and empowerment of disabled.

Indian Computer Emergency Response Team

Computer Emergency Response Team (CERT-ln) is a functional organisation of the Ministry, which has been designated under Section 70B of the Information Technology (Amendment) Act, 2008 to serve as the national agency to perform the following functions in the area of cyber security: collection, analysis and dissemination of information on cyber security incidents; forecast and alerts of cyber security incidents; emergency measures for handling cyber security incidents; coordination of cyber security incident response activities, issue guidelines, advisories, vulnerability notes; and white papers relating to information

security practices, procedures, prevention, response and reporting of cyber incidents, etc.

Centre for Development of Advanced Computing

Centre for Development of Advanced Computing (C-DAC) has emerged as a premier R&D organisation in IT&E (Information Technologies and Electronics) in the country working on strengthening national technological capabilities in the context of global developments in the field and responding to change in the market in selected foundation areas. As an institution for high-end Research and Development (R&D), C-DAC has been at the forefront of the Information Technology revolution, constantly building capacities in emerging/enabling technologies and innovating and leveraging its expertise, caliber, skill sets to develop and deploy IT products and solutions for different sectors of the economy.

Society for Applied Microwave Electronics Engineering and Research

Society for Applied Microwave Electronics Engineering and Research (SAMEER) was set up in 1984 as an autonomous laboratory in Mumbai with a broad mandate to undertake R&D work in the areas of Microwave Engineering and Electromagnetic Engineering Technology. It is an offshoot of the Special Microwave Products Unit (SMPU) set up in 1977 at the Tata Institute of Fundamental Research (TIFR), Mumbai. SAMEER, Mumbai was set up in 1984.

National Informatics Centre Services Incorporated

National Informatics Centre Services Inc. (NICSI) was set up by National Informatics Centre (NIC) in 1995 as its extended arm for providing total ICT solutions to the central and state government departments and organisations. Its services include state-of-the-art hardware, software, consulting, technical support, design and development, operations and management, quality check, as well as end-to-end ICT solutions and services.

Vikaspedia (India Development Gateway)

Vikaspedia is a MeitY initiative for providing e-knowledge and using ICT based applications for empowerment of poor (rural and urban). It seeks to maximise utility of ongoing government programmes through the provision of universally accessible digital information resources in

Indian languages, created and shared collaboratively by various development stakeholders. As part of the initiative, a multi-lingual, multi-sectoral online knowledge platform www.vikaspedia.in has been developed. The portal is available in all 22 constitutionally recognised languages of the country, besides English. The portal provides information related to six key livelihood sectors: agriculture, wealth, education, social welfare, energy and e-Governance. Two additional areas of ”Aspirational districts” and a ”Digital catalogue of government schemes” have been made available in the portal.

Telecommunications

Communications sector has assumed the position of an essential infrastructure for socio-economic development in an increasingly knowledge-intensive world. The reach of telecom services to all regions of the country has become an integral part of an innovative and technologically-driven society. As a result of sustainable measures taken by the government over the years, the Indian Telecom sector has grown exponentially and has become the second largest network in the world, next only to China.

Department of Telecommunications

Department of Telecommunication (DoT) is committed to provide secure, reliable, affordable and high quality converged telecommunication services anytime, anywhere for an accelerated inclusive socio-economic development. The Department is working towards the objective of maximising public good by making available affordable, reliable and secure voice and data services.

The Telecom sector in India has witnessed all-round growth over the last few years. Along with strong consumer demand, the liberal and reformist policies of the Government of India have been instrumental in the rapid growth of the sector. The government has ensured fair competition in terms of service being available to consumer at affordable prices. Further it has made concerted efforts at encouraging telecom equipment manufacture. The deregulation of Foreign Direct Investment norms has led to an increase in FDI in the sector. India is currently the world’s second-largest telecommunications market with a subscriber base

of 1.18 billion. India's mobile economy is growing rapidly and currently constitutes more than 98 per cent of all telephone subscriptions. The mobile industry is expected to create a total economics value of ₹14 trillion (USD 217.37 billion) by 2020.

Website: www.dot.gov.in

Tele-density

Tele-density, which denotes the number of telephones per 100 populations is an important indicator of telecom penetration. Overall tele-density in the country was 88.81 per cent at the end of November 2019. The rural tele-density was 56.71 per cent while that in urban areas it was 156.82 per cent. Amongst the service areas, Himachal Pradesh (148.81 per cent) had the highest tele-density followed by Kerala (124.65 per cent); Punjab (124.24 per cent); Tamil Nadu (115.93 per cent) and Karnataka (108.52 per cent). On the other hand, tele-density is comparatively low in service areas such as Bihar (59.27 per cent); Uttar Pradesh (66.10 per cent); West Bengal (68.53 per cent); Madhya Pradesh (69.29 per cent); Assam (70.35 per cent); and Odisha (76.53 per cent). Amongst the metros, Delhi tops in tele-density with 237.72 per cent, followed by Mumbai (164.10) and Kolkata (161.33 per cent).

Internet and Broadband Penetration

Government has placed considerable emphasis on the growth of internet and broadband in the country as part its Digital India campaign. The number of internet subscribers (both broadband and narrowband put together) which was 636.73 million at the end of March 2019 increased to 687.63 million by the end of September 2019. The number of subscribers accessing internet via wireless phones, etc., was 665.37 million at the end of September 2019 while number of wireline internet subscribers was 22.26 million. The number of broadband subscribers was 563.31 million at the end of March 2019 and 661.27 million at the end of November 2019. There was a net increase of 50.90 million in the internet subscribers during the period from March 2019 to September 2019. India is now the global leader in monthly data consumption, with average consumption per subscriber per month increasing 146 times from 62 MB in 2014 to 9.06 GB in 2019. The cost of data has also reduced substantially, enabling affordable internet access for millions of citizens. India's leap towards wireless broadband can be the driving force of the

economy going forward on the back of rapidly rising data consumption and deployment of necessary technologies by service providers. Rising consumption of data by increasing consumers has also created opportunities for the government to reach out to weaker and marginalised groups and enable social progress by providing services that were previously not feasible. Tapping into these opportunities can unlock the next phase of growth for the Indian economy.

National Broadband Mission

National Broadband Mission (NBM) was launched in 2019 with a vision to fast-track growth of digital communication infrastructure, bridge the digital divide, facilitate digital empowerment and inclusion, and provide affordable and universal access of broadband for all. Some of the objectives of the Mission which is structured with strong three principles of universality, affordability and quality are: broadband access to all villages by 2022; facilitate universal and equitable access to broadband services for across the country and especially in rural and remote areas; significantly improve quality of services for mobile and internet; develop innovative implementation models for Right of Way (RoW); and to work with states/UTs for having consistent policies pertaining to expansion of digital infrastructure including for RoW approvals required for laying OFC, etc.

Research and Development

C-DOT, an autonomous body, is DoT's R&D arm. The organisation is committed to providing a wide range of cost-effective, indigenously developed and state-of-the-art total telecom solution. C-DOT has grown to the level of a national centre for R&D in communication technology in many areas: Satellite communications, IN, ATM, DWDM, NMS. Wireless Broadband, GPON, NGN and Mobile Cellular systems.

DoT has the following PSUs under its administrative control: (a) Bharat Sanchar Nigam Limtied (BSNL); (b) Mahanagar Telephone Nigam Limited (MTNL); (c) ITI Limited; (d) Telecommunications Consultants India Limited (TCIL); (e) Bharat Broadband Network Limited (BBNL); and (f) Hemisphere Properties India Limited (HPIL).

Bharat Sanchar Nigam Limited

Bharat Sanchar Nigam Limited (BSNL), fully owned by the Government of India, formed in October 2000, provides telecom services across the length and breadth of the country excluding Delhi and Mumbai. BSNL is providing all types of telecom services namely telephone services on landline, WLL and GSM mobile, broadband, internet, leased circuits and long-distance telecom services. Rural telephony is one of its focus areas. BSNL also pays special emphasis on development of telecommunication facilities in North-Eastern region and in tribal areas as well as in the LWE affected areas.

Website: www.bsnl.co.in

Mahanagar Telephone Nigam Limited

Mahanagar Telephone Nigam Limited (MTNL), set up in 1986, is a Navratna PSU and provides telecommunication facilities in India's key metros—Delhi and Mumbai. MTNL is the principal provider of fixed-line telecommunication service in these two metropolitan cities, and for GSM mobile services in four peripheral towns of Noida, Gurgaon, Faridabad and Ghaziabad along with Delhi city and the areas falling under the Mumbai Municipal Corporation, New Mumbai Corporation and Thane Municipal Corporation along with Mumbai city, also come under the jurisdiction of the company. MTNL is providing triple play services, i.e., voice, high speed internet and IPTV on its broadband network.

Website: www.mtnl.net.in

Indian Telephone Industries

Indian Telephone Industries (ITI) Limited was established in 1948, to supply telecom equipment to the then telecom service provider, DoT. ITI started its operations in Bengaluru in 1948, which were further extended to other areas by setting up manufacturing plants at Srinagar in Jammu and Kashmir, Naini, Rae Bareli and Mankapur in Uttar Pradesh, and Palakkad in Kerala. All the manufacturing plants are accreditied with ISO 9001-2000 standards. The establishment of these plants at various locations was aimed not only at the augmentation of manufacturing capacity but also at the development of social infrastructure.

Website: www.itiltd-india.com

Telecommunications Consultants India Limited

Telecommunications Consultants India Limited (TCIL) was set up in 1978 with the main objective to provide world-class technology in all fields of telecommunications and information technology to excel in its operations in overseas and in the domestic markets by developing proper marketing strategies, to acquire state-of-the-art technology on a continuing basis and to maintain leadership. It has diversified into cyber parks, intelligent buildings, cyber and smart cities and upgradation of legacy networks by focusing on broadband, multimedia convergent service networks, entering new areas of IT and IT-enabled services. It is also developing telecom and IT training infrastructure abroad.

Website: www.tcil.india.com

Bharat Broadband Network Limited

Bharat Broadband Network Limited (BBNL) a Special Purpose Vehicle (SPV), namely, Bharat Broadband networks Limited (BBNL) was incorporated in 2012 under the Indian Companies Act, 1956 for execution of the Bharat Net for connecting 2.50 lakh (approximately) Gram Panchayats (GPs).

Website: www.bbnl.nic.in

Hemisphere Properties India Ltd

Hemisphere Properties India Limited (HPIL) is another PSU under DoT. At the time of 25 per cent stake strategic sale in Videsh Sanchar Nigam Limited (Now Tata Communications Limited), surplus land measuring 773.13 acres was demarcated out of total 1230.13 acres of land at four stations and it was decided that surplus land will not be a part of disinvestment bid and would be managed by a separate realty company.

Vision of Digital India

The vision of Digital India is to transform the country into a digitally empowered society and a knowledge economy. This programme was envisaged by Department of Electronics and Information Technology (DeitY). It would also bring in public accountability through mandated delivery of government's services electronically; and a Unique ID and e-Pramaan, based on authentic and standard based interoperable and integrated government applications and data basis. The source of funding for most of the e-governance projects at present is through budgetary

provisions of respective ministries/ departments in the central or state governments. Requirements of funds for individual project(s) for Digital India will be worked out by respective nodal ministries/departments.

Scope of Digital India

The overall scope of this programme is: (a) to prepare India for a knowledge future; (b) on being transformative that is to realise IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow); (c) making technology central to enabling change; and (d) on being an Umbrella Programme covering many departments.

The programme weaves together a large number of ideas and thoughts into a single, comprehensive vision, so that each of them is seen as part of a larger goal. Each individual element stands on its own, but is also part of the larger picture. The weaving together makes the Mission transformative in totality.

It will pull together many existing schemes which would be restructured and re-focused and implemented in a synchronised manner. The common branding of the programmes as Digital India highlights their transformative impact.

Digital India aims to provide the much-needed thrust to the nine pillars of growth areas, namely: (1) broadband highways; (2) universal access to mobile connectivity; (3) public internet access programme; (4) e-governance: reforming government through technology; (5) e-Kranti - electronic delivery of services; (6) information for all; (7) electronics manufacturing; (8) IT for Jobs; and (9) early harvest programmes.

Following initiatives have been taken under the Digital India programme. LIMBS (Legal Information and Management Based System) is an easy to access, web-based tool for comprehensive, regulatory and proactive monitoring of court cases. It is a web-based platform which provides a common access portal to all users having varying needs and cutting across administration pyramids, i.e., access is available right from the file dealer to the top management. LIMBS has user-friendly data entry screen for capturing the details of court cases. Progress of court cases can be entered. Various MIS reports help to monitor these cases. E-document vault allows the user to enter the important judgement. SMS alerts are used to sensitise the users over important issues.

National Data Sharing and Accessibility Programme

The objective of this policy is to facilitate the access to government owned shareable data and information in both human readable and machine readable forms through a network all over the country in a proactive updatable manner, within the framework of various related policies. Acts and rules of Government of India, thereby permitting wider accessibility and use of public data and information.

e-Office

The main objectives of e-Office are: (a) to improve efficiency, consistency and effectiveness of government responses; (b) to reduce turnaround time and to meet and demands of the citizens charter; (c) to provide for effective resource management to improve the quality of administration; (d) to reduce processing delays; (e) to establish transparency and accountability; and (f) the system will automate movement of files within government offices, etc.

9 Defence

THE Government of India is responsible for ensuring the defence of the country and every part thereof. This responsibility is discharged through the Ministry of Defence (MoD) which provides the policy framework and wherewithal to the Armed Forces to discharge their responsibilities towards this. MoD was created after independence under a Cabinet Minister. Each Service was placed under its own Commander-in-Chief. In 1955, the Commanders-in-Chief were renamed as the Chief of the Army Staff, the Chief of the Naval Staff and the Chief of the Air Staff. A Department of Defence Production was set up in 1962 to deal with research, development and production of defence equipment. A Department of Defence Supplies was created in 1965 for planning and execution of schemes for import substitution of defence requirements. These two departments were later merged to form the Department of Defence Production and Supplies. In 2004, the name of Department of Defence Production and Supplies was changed to Department of Defence Production. In 1980, the Department of Defence Research and Development was created while the Department of Ex-Servicemen Welfare was formed in 2004. The *Raksha Mantri* (Defence Minister) is the head of the Ministry of Defence. The post of Chief of Defence Staff was created in 2019.

Ministry of Defence and its Departments

The principal task of the Ministry is to frame policy directions on defence and security related matters and communicate them for implementation to the services headquarters, inter-service organisations, production establishments and research and development organisations. It is required to ensure effective implementation of the government's policy directions and the execution of approved programmes within the allocated resources. The principal functions of the departments include: dealing with the Integrated Defence Staff (IDS) and three Services and various inter-service organisations. It is also responsible for the Defence

Budget, establishment matters, defence policy, matters relating to Parliament, defence co-operation with foreign countries and co-ordination of all defence related activities; the Department of Defence Production deals with matters pertaining to defence production, indigenisation of imported stores, equipment and spares, planning and control of departmental production units of the Ordnance Factory Board and Defence Public Sector Undertakings (DPSUs).; the Department of Defence Research and Development advises the government on scientific aspects of military equipment and logistics and the formulation of research, design and development plans for equipment required by the Services.; and the Department of Ex-Servicemen Welfare deals with all resettlement, welfare and pensionary matters of Ex-Servicemen.

Websites : www.mod.gov.in

www.ddp.mod.gov.in

www.desw.gov.in

www.mod.gov.in/dod

www.drdo.gov.in

Chief of Defence Staff

The post of the Chief of Defence Staff (CDS) in the rank of a four star General with salary and perquisites at par with a Service Chief was created in 2019. The government has also defined his roles and responsibilities. Another department - the Department of Military Affairs (DMA) was also created within the Ministry of Defence. This department is to be headed by the CDS who would also be the Secretary of Department of Millitary Affairs (DMA).

Headquarters Integrated Defence Staff

Headquarters Integrated Defence Staff (HQIDS) was raised in 2001, based on the recommendations of Group of Ministers to review Higher Defence Management. Under the aegis of Chairman and Chiefs of Staff Committee, the organisation has been working towards achievement of synergy amongst the Services. HQIDS is headed by the Chief of Integrated Defence Staff to the Chairman COSC (CISC) who enjoys a status equivalent to that of a Vice Chief of a Service HQ. The organisation has representation from all three Services, MEA, DRDO, DoD and Def (Finance). The envisaged role of the HQ has been organised

into sets of coherent functions and matching organisational blocks in the form of branches, division and directorates. IDS provides secretariat and general assistance to the Chairman of the Chiefs of Staff Committee (COSC). It facilitates efficient functioning of multi-service bodies. The major highlights of the role and function profile of the organisation include - (a) Defence Crisis Management Group (DCMG) which is entrusted with preparing contingency plans and assessments for consideration of COSC and subsequent approval of plan by RM/CCS, as required; (b) long range plans and annual budgetary proposals for the three Services and presenting coordinated set of proposals to the *Raksha Mantri;* (c) joint training and joint employment of Forces by formulating policy and programmes on employment, joint training and military education for personnel of the defence services.

Army

The geo-political and geo-economic landscape in a multi-polar world is dynamic and aspects related to application of military force are evolving rapidly. Future conflicts are likely to be violent, unpredictable with severely contested battle spaces, seamlessly connected and constrained with indeterminable factors. In future, even conventional conflicts are likely to have a large asymmetric component and are accordingly being termed as 'Hybrid' wars. Considering the multitude of threats to India's territorial integrity and sovereignty, both from internal and external sources and the need for a peaceful internal environment permitting socio-economic progress, the 'land' dimension will remain central in the foreseeable future. Currently, the army is involved in effectively countering both military and non-military facets of asymmetric and sub-conventional threats, emerging from within and outside the country. The infirmities in border management, however, have the propensity to spiral into a wider conflict demanding an intensive army footprint. Hence, the Indian Army shall continue to have a pivotal role in safeguarding the territorial integrity of the country.

Indian Army is poised for major modernisation in the next few years. With its extensive range of equipment spanning a vast technological spread, it is a key entity in facilitating the 'Make in India' pursuit, a success. Technology, being a major driver in the evolution of the present

character of conflict, shall shape the contours of future battles. Considering the dynamic and unpredictable nature of future warfare, it is prudent to enhance the lethality, survivability, mobility, situational awareness and sustainability of the army. Efforts to equip the soldier with modern, state-of-the-art, modular, lightweight personal weapons and systems are being made in a big way. A comprehensive and persistent, focused coordination with the industry towards development of the artillery guns, ammunition to enhance its long range precision firepower and mobility and future combat vehicles to provide sustained mobility to the combat arms, is being pursued. Architecture for providing capabilities of cyber warfare, space warfare and special operations have been bolstered with modern equipment and technology-driven systems. The Indian Army is pursuing technological infusion into war fighting through a well articulated long term perspective planning process.

Fight Against Covid-19

The Indian Army has been at the forefront in combating Covid-19 and rendering necessary assistance to the civil administration.The army established the first quarantine facility for Indian evacuees.Thereafter, setting up of quarantine facilities and Covid hospitals are the two major areas in which the army extended its support. Quarantine were established by the army across the country out of which 'Manesar Model' has been replicated. Testing facilities were established in nine laboratories with a capability to conduct close to 600 tests per day apart from earmarking 50 hospitals to be re-structured/geared up to meet the health challenge while dedicating 9,000 beds to treat affected patients. The responsibility for Narela quarantine facility established by the Delhi government to handle approximately 1,200 Covid-19 cases of Delhi was taken over by the army, apart from providing medical cover to Covid-19 positive personnel of Delhi Police at Base Hospital, Delhi. The army has reached out to the industry to identify/map sources for procurement of equipment required to combat the pandemic. Allied equipment like pre-fabricated shelters, sanitisation facilities and chemicals were identified and mapped.

Website: www.indianarmy.nic.in

Contribution to UN Peacekeeping

Despite operational and internal security commitments, the Indian Army has been significantly contributing to United Nations Peacekeeping Missions and is the second largest troops' contributor in various UN missions. Currently, four UN Peace Keeping Missions' contingents of India are deployed around the world. Since 1950, Indian Army has participated in 51 UN missions out of the total of 71 UN missions, across the globe. It has contributed more than 2,34,000 Indian troops in various UN missions. The most significant contribution of the Indian Army has been to ensure peace and stability in Africa and parts of Asia. India has so far provided 15 Force Commanders in various UN missions. India is contributing comprehensively towards the capability building of UN by training peacekeepers of member states. India has a well-established training institute in 'Centre for United Nations Peacekeeping' in Delhi, which was established in 2000, training both personnel from India and abroad on UN peacekeeping. Seven international courses are conducted for international participants including, UN Military Observers Course, UN Female Military Officers Course and UN Contingent Commanders Course.

Operation Sadbhavna

The army undertakes a unique human initiative in Jammu and Kashmir and Ladakh to address the aspirations of people affected by terrorism. Operation Sadbhavna has provided succour to a large section of population. Launched in an extremely challenging operation environment, the operation is a part of the counter terrorist strategy to wrest the initiative and re-integrate the 'Awaam' with the national mainstream. The aim of Operation Sadbhavna is also to supplement the efforts of the government in restoring public services, rebuilding infrastructure and creating a conducive environment for development.

Navy

The raison d'etre of navies is to safeguard the nation's use of seas for its legitimate sovereign purpose, whilst concurrently guarding against inimical use of the sea by others. The full range of operations in which the naval forces may be involved is vast, ranging from high intensity war fighting at one end and humanitarian assistance and disaster relief operations at the other end. This broad continuum of operations can be

broken down into distinct roles at each demanding a specific approach to the conduct of operations. Through the discharge of roles, the Indian Navy (IN) acts as the prime enabler and guarantor of the country's maritime sovereignty and myriad use of sea activities. Accordingly, the main roles that IN undertakes are military, diplomatic, constabulary and benign.

Website : www.indiannavy.nic.in

Military Role

The primary military objective of the IN is to deter any military adventurism against the country, including intervention in India's affairs and subversive strategies against the national interests and the ability to inflict a crushing defeat on the adversary in the event of hostilities. The ways and means of deterrence by the IN include conventional deterrence by both denial and punishment, by maintaining a robust military capability and posture to convince potential aggressors of high costs and limited gains from any aggression or intervention against India's national interests. India has a long coastline, numerous island territories, a vast maritime zone, substantial energy infrastructure and other vital assets in the littoral area; besides a large vibrant population, significant portions of which also live in the littoral. Since there are no physical barriers at sea, security of these areas and assets are inherently vulnerable to sea-borne threats, and enhancing their security is a prime objective of the IN in the military role. The IN has also been designated as the agency responsible for overall Maritime Security including Coastal Security and Offshore Security.

Anti-Piracy Operations

A large percentage of India's trade, including oil and fertilisers, pass through the Gulf of Aden (GoA). The Ministry of Shipping has estimated that Indian imports through this route are valued at about USD 50 billion and exports at USD 60 billion. The safety and unhindered continuity of maritime trade, on this route, is a primarily national concern as it directly impacts our economy. Piracy off the coast of Somalia had grown steadily over the years and had assumed alarming proportions in 2010 and 2011. There has been a noticeable decline in piracy since 2012. To protect Indian-flagged ships and Indian citizens employed in seafaring duties, IN commenced anti-piracy patrols in the GoA from 2008. In addition to

escorting Indian flagged vessels, ships of other flags have also been escorted by IN ships.

In addition to escorting Indian flagged vessels, ships of other countries have also been escorted by IN ships. A total of 3,440 ships (413 Indian flagged and 3,027 foreign flagged) have been escorted by IN ships in the GoA by July 2020. During deployment for anti-piracy operations, Indian Naval ships have thwarted 44 piracy attempts. A case was also taken up for revision of the Piracy High Risk Area (HRA) with the shipping industry under the aegis of Shared Awareness and De-confliction (SHADE) and the Contact Group on Piracy off the Coast of Somalia (CGPCS).

One IN ship has been deployed for Op SANKALP since June 2019, to ensure safe passage of Indian Flagged Merchant Vessels (IFMVs) transiting through Strait of Hormuz due to the situation arising from heightened tensions between Iran and US. Since the execution of Op SANKALP, the IN has escorted approximately 143 lakh tonnes of cargo onboard 143 IFMVs, thus providing reassurance to Indian seafarers and protection to Indian mercantile trade.

Relief during Floods, Cyclones, Covid-19

IN rescue teams were deployed to the flood affected areas in Karnataka, Maharashtra, Goa, Andhra Pradesh in 2019 to undertake relief and rescue operations. For Cyclone 'Nisarga', which hit Maharashtra and its neighbouring areas, IN Ships were deployed for relief and rescue.

Air Force

The Indian Air Force (IAF) has always encouraged development of indigenous defence production capability and capacities. The Defence Procurement Procedure, 2016 assigned highest preference to 'Make' and Buy (Indian-Indigenously Designed and Developed Manufacturer (IDDM)) categories. LCA Mk-1A, Light Combat Helicopter (LCH), AWACS (India) and High Frequency Radio set are some of the cases being progressed through the IDDM route.

Due to its capability of short reaction time and ability to reach the affected area, IAF is one of the first responders to any crisis/situation. In the last one year, IAF has flown over 1600 sorties logging 1900 hours

towards Humanitarian Assistance and Disaster Relief (HADR) missions within as well as outside the country. The IAF has also responded at the earliest in aid to civil power for various kinds of missions.

Website : www.indianairforce.nic.in

Make in India

One of the main focus areas of the IAF is to support indigenisation and manufacturing of defence equipment, thus reducing dependence on the import of those. Light Combat Aircraft, Akash Missile, Advance Light Helicopters (ALH) have already been inducted, thus giving impetus to indigenisation. Further, IAF plans to induct more capable and potent LCA Mk-1A in the future. IAF is also actively supporting DoD of LCH, RPAs, Medium Power Radars, Low Level Tracking Radars and other systems. IAF is also closely coordinating with DRDO for development of various types of state-of-art-weapons. Modernisation plan is being pursued to beef up the defence manufacturing base and the ecosystem. IAF has already identified series of defence equipment that can be manufactured under 'Make' category. MoD has been striving to include the private sector in production of defence equipment. Various projects under 'Strategic Partner' model will give impetus to 'Make in India' initiative. This will not only generate employment and enhance skills, but also assist in harnessing key technologies for growth of the aerospace sector in the country.

Digital India Initiative

IAF has established pan-IAF captive 3 G WCDMA Mobile Network, AFCEL. The network has been fully operational with voice call and data services. In-house initiatives have also seen development of the apps like: Instant Messaging App (AFCHAT); IAF Directory Search App; Conference Scheduler App; Caller-IDApp; Air Force Central Accounts Office (AFCAO) App and Website; and Med Watch App.

Women Empowerment

Avani Chaturvedi, Bhawana Kanth and Mohana Singh created history in 2016 by becoming the first women pilots to be commissioned into the fighter stream. These women pilots, now Flying Officers, have been posted to MiG-2 Bison and Hawk units as Sqn Pilots on successful completion of their fighter flying training. A second batch of women

cadets have also been selected in fighter stream. Presently, they are completing Stage-ll (Fighter) training at Air Force Station Hakimpet and are expected to be commissioned into the Fighter Stream after successful completion of their training.

Force Modernisation

The IAF remains seized of the need to remain abreast with the emerging threat scenario in the neighbourhood, as also meet the challenges of fighting an integrated battle in a high technology, network centric, future battlespace. Major initiatives were undertaken to induct new technologies and platforms, while simultaneously harmonising the existing systems and assets into seamless architecture to enhance operational preparedness. The latest state-of-the-art aircrafts to join the IAF inventory are the Rafale fighter aircraft, the Apache attack helicopter and the Chinook heavy lift helicopter. These potent and versatile platforms inject tremendous operational capabilities for the IAF. In addition, to enhance the technical and operational performance of the existing fleet, numerous mid-life technology upgrades are also being undertaken.

Commissioned Ranks

The following are the commissioned ranks in the three Services; each rank is shown opposite its equivalent in the other Service:

Army	Navy	Air Force
General	Admiral	Air Chief Marshal
Lieutenant General	Vice Admiral	Air Marshal
Major General	Rear Admiral	Air Vice Marshal
Brigadier	Commodore	Air Commodore
Colonel	Captain	Group Captain
Lieutenant Colonel	Commander	Wing Commander
Major	Lieutenant Commander	Squadron Leader
Captain	Lieutenant	Flight Lieutenant
Lieutenant	Sub Lieutenant	Flying Officer

Indian Coast Guard

Indian Coast Guard was constituted in 1977 with following charter of duties: (a)safety and protection of artificial islands, offshore terminals and installations; (b)protection to fishermen including assistance to them at sea while in distress; (c)preserve and protect maritime environment and to prevent and control marine pollution; (d) assisting Customs and other authorities in anti-smuggling operations; (e) safety of life and property at sea and collection of scientific data; and (f)enforcing the provisions of various enactments in the maritime zones.

The Indian Coast Guard has also been given many additional responsibilities. The major among them are: (a) coastal security in territorial waters; (b) enforcement, monitoring and surveillance of deep sea fishing; (c) search and rescue for merchant ships; (d) marine oil-spill response measures; and (e) lead intelligence agency for coastal and sea borders.

Website : www.indiancoastguard.gov.in

Recruitment

The Armed Forces epitomise the ideals of service, sacrifice, patriotism and composite culture of the country. Recruitment to the Armed Forces is voluntary and open to all citizens of India irrespective of caste, class, religion and community provided the laid down physical, medical and educational criteria are met.

Commissioned Officers in the Armed Forces are recruited mainly through UPSC which conducts the following two All India Competitive Examinations:

(a) National Defence Academy (NDA) and Naval Academy (NA): The UPSC holds entrance examination twice a year for entry into the NDA and NA. Candidates, on completion of 10+2 examination or while in the 12th standard, are eligible to compete. Having cleared UPSC written examination, eligible candidates undergo Service Selection Board (SSB) interview, which lasts for five days. On being medically fit and coming in NDA merit list, successful candidates join the NDA or NA as per their option of service exercised at the time of applying. On completion of the course, they are sent to the respective Service Academies for their pre-commissioning training.

(b) Combined Defence Services Examination (CDSE): CDSE is conducted by the UPSC twice a year. University graduates or those in final year of graduation are eligible to appear in the examination. Candidates qualifying in written examination have to undergo SSB interview and medical tests. Candidates whose names appear in the merit list undergo basic military training of 18 months at Indian Military Academy/Air Force Academy and Naval Academy for Permanent Commission and 11 months at Officers Training Academy (OTA) to become Short Service Commissioned Officers (SSCOs). SSCOs can serve for a duration of 10 years extendable up to 14 years. However, they can opt for permanent commission after completion of 10 years or seek release after completion of five years of service, which is considered on case-to-case basis.

Recruitment in the Indian Army

Apart from the UPSC entries, commissioned officers are also recruited in the army through the following entries:

(a) University Entry Scheme (UES) : Pre-Final year students in the notified engineering disciplines are eligible to apply for Permanent Commission in the Technical Arms of the Army as Commissioned Officers under the UES. Eligible candidates are selected through a campus interview by the Screening Teams deputed by the Army Headquarters. These candidates are required to appear before the SSB and Medical Board. Successful candidates undergo one year pre-commission training at the Indian Military Academy (IMA), Dehradun. Cadets through this entry are also entitled to one year ante-date seniority on commissioning.

(b) Technical Graduates Course (TGC): Engineering graduates from notified discipline of engineering, postgraduates with minimum second division aggregate marks in notified discipline for Army Education Corps and M.Sc. in Agriculture/ Dairy for Military Farm are eligible to apply for Permanent Commission through this entry. After the SSB and the Medical Board, the selected candidates are required to undergo one year pre-commissioned training at the IMA, Dehradun. Engineering graduates through this entry are also entitled to one year ante-date seniority on commissioning.

(c) Short Service Commission (Technical) Entry: The Short Service Commission (Technical) Entry Scheme provides avenue for recruitment

to eligible technical graduates/postgraduates into Technical Arms. After SSB and Medical Board, the selected candidates are required to undergo approximately 49 weeks pre-commission training at OTA, Chennai. On completion of training, they are inducted as Short Service Commissioned Officers. Cadets through this entry are also entitled to one year's ante-date seniority on commissioning.

(d) 10+ 2 Technical Entry Scheme (TES): Candidates who have qualified 10+2 CBSE/ICSE/State Board Examination with minimum aggregate of 70 per cent marks in Physics, Chemistry and Mathematics are eligible to apply for commission under the 10+2(TES). On being successful in the SSB and being declared fit by the medical board, they undergo one year basic military training at the Officers Training Academy, Gaya, and thereafter undergo three years engineering degree course in respective streams before getting Permanent Commission. On being commissioned, they are further put through one year of post commissioning training for the Arm/Service into which they are commissioned.

(e) Short Service Commission (Women): Eligible women candidates are recruited in the Army as Short Service Commission Officers. Commission is granted in Corps of Electronics and Mechanical Engineers, Corps of Engineers, Signals, Army Educational Corps, Military Intelligence Corps, Judge Advocate General's Branch, Army Supply Corps, Army Ordnance Corps and Army Air Defence. Women are offered Short Service Commission in three streams viz. Non-Technical Graduate, Technical and Post Graduate/Specialist for a period of ten years, extendable by additional four years purely on voluntary basis. Recently, the Government of India had granted an option for permanent commission for officers in Army Education Corps and Judge Advocate General Branch after completion of 10 years of service. The duration of training is 49 weeks at Officers Training Academy, Chennai. For Short Service Commission Women (Technical) Entry, passed or final year/semester students of B.E./B.Tech. in notified streams are eligible to apply. Eligible candidates appear for direct SSB interview and Medical Test, thereafter. The applicants for Non-Technical Graduate, however, is required to apply through UPSC and after written examination, come up for SSB interview as is being done for Short Service Commissioned male officers. Atotal of 20 per cent allotted seats from Non-Technical stream have been reserved for NCC 'C certificate holders women candidates

with minimum ‘B’ grade and 50 per cent aggregate marks in graduation examination. The applications will be routed through NCC Directorate, Integrated Headquarters of Ministry of Defence (Army), as applicable for male officers. For Judge Advocate General Branch, applications are invited from Law Graduates with minimum 55 per cent, for direct SSB interviews. Widows of Defence Personnel who meet the laid down eligibility criteria are granted four years age relaxation and 5 per cent seats of each course (2.5 each in Tech and Non-Tech) are reserved for them. Short Service Commission Women (Tech), NCC entry and Judge Advocate General Branch are exempted from written examinations and need to apply directly to Additional Directorate General of Recruiting, Integrated Headquarters of Ministry of Defence (Army). The notification is published along with SSCW (Tech) twice a year.

(f) NCC (Special Entry Scheme): University graduates possessing NCC ‘C Certificate with minimum ‘B’ grade and 50 per cent aggregate marks in graduation examination are eligible to apply for Short Service Commission through this entry. Those studying in third year are allowed to apply provided they have secured minimum 50 per cent aggregate marks in first two years. Such candidates will need to secure overall aggregate of minimum 50 per cent marks if selected in interview failing which his candidature will be cancelled. Candidates must possess graduation degree at the time of joining OTA or those candidates studying in third year should be able to produce the degree within 12 weeks from date of commencement of training at OTA. Such cadets have to undergo SSB interview followed by a medical board. Candidates meeting the qualitative requirements have to apply through NCC Group Headquarters at the State level. After screening by respective Group Headquarters, Directorate General of NCC forwards the applications of eligible cadets to the Recruiting Directorate of Integrated Headquarters of Ministry of Defence (Army).

(g) judge Advocate General Entry: Law graduates with minimum 55 per cent aggregate marks in LLB, aged between 21 to 27 years, can apply for Judge Advocate General Branch. Eligible candidates are called for direct SSB interview and medical test, thereafter. It is a Short Service Commission Entry wherein suitable candidates can opt for Permanent Commission.

(h) Recruitment of Junior Commissioned Officers and Other Ranks (JCOs and ORs): In the army, there are eleven Zonal Recruiting Offices, two Gorkha Recruiting Depots, one Independent Recruiting Office and 59 Army Recruiting Offices in addition to 48 Regimental Centers, which carry out recruitment through rallies in their respective areas of jurisdiction. Recruitment of JCOs and OR is carried out through Online Application System for Soldier General Duty, Soldier Tradesman, Soldier Technical, Soldier Clerk/Store Keeper Trade and Soldier Nursing Assistant categories. However, for categories like Religious Teacher JCO (RT JCO), Havildar Education, Havildar Auto Cartographer and JCO Catering, application system is being followed. The current recruitment for JCOs and OR comprises screening of aspiring candidates at rally site in the 1.6 km run followed by document checking, physical fitness tests, physical measurements, and medical examination. This is followed by a written examination for the candidates who are found eligible in all respects. Finally, selected candidates are dispatched to respective Training Centers for training. Efforts are made so that each district of the country is covered at least once by recruitment rallies in a recruitment year.

Recruitment in the Indian Navy

The Method of Recruitment: The recruitment system of the IN is a streamlined, transparent, expeditious and candidate-friendly procedure. There are two modes of induction in the IN, viz. UPSC Entry and Non-UPSC Entry.

(a) UPSC Entry: The UPSC holds an examination, twice a year, for entry into the National Defence Academy (NDA) and Indian Naval Academy (INA) as Permanent Commission (PC) entries. Candidates are eligible to compete on completion of the 10+2 (PCM) Examination or while in the 12^{th} standard. UPSC shortlists candidates after written examinations. Thereafter, candidates are sent to the Service Selection Boards located at Bengaluru, Bhopal, Coimbatore and Visakhapatam. Results of qualified candidates are forwarded to UPSC for making the final merit list. Medically fit candidates, who are in the merit list, are intimated for appointment to NDA/INAas cadets. On completion of the NDA/INA training, the Naval Cadets are sent to training ships at Kochi for Naval sea training. For the Graduate Special Entry, the UPSC holds the

Combined Defence Services Examination (CDSE), twice a year. Graduates with B. Tech. degree are also eligible to appear in the examination. Successful candidates join the Indian Naval Academy at Ezhimala, Kerala for the Naval Orientation Course (NOC).

(b) Non-UPSC Entry: The Non-UPSC entries cater for both Permanent Commission (PC) and Short Service Commission (SSC). In this case the applications are invited and shortlisted at IHQ MoD (Navy). Subsequently the shortlisted candidates are then sent for Service Selection Boards (SSB) interviews. Thereafter, a merit list, comprising qualified candidates, is prepared as per the availability of vacancies. Recruitment for non-UPSC entries is made through SSBs for the Executive, Engineering including Naval Architects, Electrical Engineering and the Education Branches/cadres of Navy.

(c) 10+2 (Cadet Entry Scheme): This scheme is for permanent commission in the Executive, Engineering and Electrical branches of the IN. Under this scheme, candidates with 10+2 (PCM) qualifications, after selection through the Services Selection Board, are sent to the Indian Naval Academy for the B. Tech. course. On successful completion of the course they are granted Permanent Commission in the Executive, Electrical and Engineering branches of the Indian Navy.

(d) University Entry Scheme (UES): The UES has been re-launched as a Short Service Commission Scheme. Seventh and eighth semester engineering college students are eligible for induction into the Executive and Technical Branches of the IN. Naval selection teams from the IHQ of MoD (Navy) and Command Headquarters visit AICTE approved engineering colleges, across the country, to shortlist the candidates. The shortlisted candidates, based on All India Merit, undergo interview at the Services Selection Board. The successful candidates are, thereafter, put through medical tests. Final selection is based on all India merit ranks on the basis of marks obtained in the SSB interviews and availability of vacancies.

(e) Women Officers: Women are being inducted into the Navy, as Short Service Commission (SSC) officers in the Executive Branch (Observer, ATC, Law and Logistic), Education Branch and the Naval Architecture cadre of the Engineering Branch.

(f) Permanent Commission to SSC Officers: The government has introduced grant of Permanent Commission prospectively to the Short Service Commission officers, for both men and women, of the Executive Branch (Law Cadre), Education Branch and Engineering Branch (Naval Architecture) w.e.f. 2008.

(g) Recruitment through NCC: University graduates possessing Naval Wing NCC 'C certificate with minimum 'B' grading and 50 per cent marks in the graduation degree examination are inducted in the Navy as regular commissioned officers. These graduates are exempted from appearing in the CDSE conducted by the UPSC and are selected through the SSB interview only. They join the Indian Naval Academy for Naval Orientation Course (NOC) along with the CDSE cadets.

(h) Special Naval Architecture Entry Scheme: The government has approved the induction of Naval Architect officers into the Engineering Branch of the Indian Navy, as Short Service Commissioned Officers, under a 'Special Naval Architects Entry Scheme' (SNAES). An empowered Naval team visits I IT" Kharagpur, I IT" Chennai, Cochin University of Science and Technology (CUSAT) and Andhra University, where B. Tech. (Naval Architecture) courses are conducted, to select candidates through campus interviews. The selected candidates undergo medical examination at the nearest Military Hospital and, if found fit, are selected for training.

(i) Recruitment of Sailors: Recruitment into the Navy is carried out on all India basis on state-wise merit of the eligible recruitable male population, as per the number of vacancies available. The number of personnel recruited from a particular state depends on the number of eligible applicants who are able to qualify in the written examination, physical fitness test, and medical examination and their relative position in the merit. There is no quota of vacancies based on caste/creed or religion. Advertisements in all leading national and regional newspapers and Employment News are published, inviting applications from eligible volunteers. Publicity material is also dispatched to a large number of schools/colleges and all Zilla Sainik Boards. The local administration carries out the publicity drive in rural/ backward areas through local media.

Types of Entries: The various entries, for recruitment of sailors, are as follows (with educational qualifications indicated against each):

(a) Artificer Apprentices (AAs) -10+2 (PCM).
(b) Senior Secondary Recruits (SSR) -10+2 (Sc.).
(c) Matric Entry Recruits (MER), for recruitment of Cooks, Stewards and Musicians - Matriculation.
(d) Non Matric Recruits (NMR), for recruitment of Topass Sailors (Safaiwala) - Class VI.
(e) Direct Entry (Outstanding Sportsmen).

Recruitment in the Indian Air Force

Selection of Officers

(a) Induction of Officers: Induction to National Defence Academy (NDA) and Combined Defence Service Examination (CDSE) entries are through UPSC. The non-UPSC entries for induction into the officer's cadre are: SSC (Men and Women) Flying, NCC Entry (PC for men), ASC (PC for men), GDOC(Non Tech) (PC for Men), Airmen Entry (PC for Air Warriors), SSS (Technical) (Men and Women) and SSC (Non Tech) (Men and Women).

(b) Recruitment through Service Selection: Recruitment through Service Selection Boards/Air Force Selection Boards is made for the Flying (Pilot), Aeronautical Engineering (Electronics), Aeronautical Engineering (Mechanical), Education, Administration, Logistics, Accounts and Meteorology branches for the Air Force.

(c) University Entry Scheme: Final/pre-final year students in engineering disciplines are eligible for induction into the technical branches of Air Force as permanent commissioned officers under the University Entry Scheme.

(d) Recruitment of Women Officers: Eligible women are recruited as Short Service Commissioned Officers in the Flying, Aeronautical Engineering (Electronics), Aeronautical Engineering (Mechanical), Education, Administration, Logistics, Accounts and Meteorology branches of the IAF.

(e) Recruitment through National Cadet Corps (NCC): University graduates possessing NCC 'C Certificate with minimum 'B' grading and 50 per cent marks in graduation are inducted in Navy and Air Force as

Regular Commissioned Officers by way of selection through the Service Selection Boards. Flying Branch Cadets should have Maths and Physics as main subjects in 10+2 level.

(f) Recruitment of Personnel Below Officers Rank (PBORs): The selection of candidates for Personnel Below Officers Rank (PBORs) is carried out through a centralised selection system on all India basis in which Central Airmen Selection Board (CASB) assisted by 14 Airmen Selection Centres (ASCs) located at different parts of the country, carries out the recruitment.

Training

A large number of training institutions in the defence sector work in coordination with one another. While some institutions train personnel from all the 3 services viz. Army, Navy and Air Force, some cater to the training needs of the individual services.

Training of Tri-Services

National Defence College

The National Defence College is a premier training institution of the Ministry of Defence, which has established a name for itself as a centre of excellence on matters pertaining to National Security and Strategic Studies. Selected armed forces' officers of the rank of Brigadier/equivalent from Indian and Foreign Armed Forces and Civil Services officers of equivalent status of Director and above are nominated for training at the college. The officers undergo an eleven months' programme with focus on national security, covering all dimensions of domestic, regional and international issues to equip future policy-makers with background necessary to get a broad understanding of the multifarious economic, political, military, scientific and organisational aspects that are essential for planning of national strategy.

Website : www.ndc.nic.in

College of Defence Management

The College of Defence Management (CDM) is the only tri-service training institution in the country which imparts defence management education to senior officers of the three services, paramilitary forces,

officers of the Ministry of Defence and international participants at the conceptual, directional and the functional levels. The College also hosts a number of civilian and foreign delegations on defence management training. To meet the requirements of 'Higher Defence Management' education in the Indian Armed Forces, necessitated by the 'Revolution in Military Affairs', CDM has optimised its existing training infrastructure and trains approximately 500 officers annually. CDM has also developed tailor-made capsule courses/Management Development Programmes (MDPs) for management education at all levels in the Indian Armed Forces. These MDPs are also subscribed by large number of friendly foreign countries.

Website : www.cdm.ap.nic.in

Defence Services Staff College

Defence Services Staff College (DSSC) is an Armed Forces Training Institute (AFTI), which conducts staff course for the selected officers of the three services and also the officers from the central civil services. In addition, defence officers from friendly foreign countries also subscribe to the Staff Course conducted by the college. The officers passing out from DSSC are awarded Master of Science (MSc) in Defence and Strategic Studies from Chennai University.

Website: www.dssc.gov.in

National Defence Academy

National Defence Academy (NDA) is a premier tri-service institution which trains cadets of all three services before inducting them into their respective pre-commissioning training academies. Intake to NDA is organised through UPSC examination which is conducted twice in a year in the month of April and September. Applicants are required to be XII Standard pass and in the age bracket of 16 to 19 years at the time of joining. The three years course at NDA is covered in six semesters and cadets are awarded with B.A./B.Sc. degree. On conclusion of this training, the cadets proceed to their respective Service Academies for further service specific training before being commissioned as officers in the Armed Forces.

Military Institute of Technology

Military Institute of Technology (MILIT) is a tri-services training establishment since 1952 which conducts courses for Indian and international military officers and DRDO scientists. The flagship courses conducted at MILIT are TSOC (Army, Air Force and Navy), TSOC (Air Force), TSOC (Navy) and NTSC alongwith 18 other courses of varying durations which primarily deal with military technology. The institute is located in Pune.

Website: www.nda.nic.in

Indian Military Academy

Founded in 1932, Indian Military Academy (IMA), Dehradun aims at the fullest development of intellectual, moral and physical qualities of persons joining the Army as officers. The various modes of entry into IMA are: (a) on graduation from NDA; (b) on graduation from Army Cadet College, which is a wing of the IMA itself; (c) direct entry graduate cadets, who qualify the Union Public Service Commission Exam and get through the Service Selection Board; (d) for Technical Graduate's Course (TGC); and (e) under University Entry Scheme (UES) for engineering college students in Final/ Pre-Final year of studies. The IMA also imparts training to gentlemen cadets from friendly countries.

Officers Training Academy

Established in 1963, the Officers Training School (OTS) was re-designated as Officers Training Academy (OTA) from 1988 on completion of 25 years of its existence. Its main task, before 1965, was to train gentlemen cadets for grant of Emergency Commission. From 1965 onwards, the Academy trains cadets for Short Service Commission. With the entry of women officers in the Army since 1992, around 100 lady officers now get commissioned from OTA every year in Army Service Corps, Judge Advocate General's Department, Corps of Engineers, Signals and Electrical and Mechanical Engineers.

Officers Training Academy, Gaya

The Academy was commissioned in 2011. The training capacity as of now is around 400 gentlemen cadets. The capacity will be progressively built up to a strength of 750 gentlemen cadets. OTA, Gaya imparts training for the following: (a) 10+2 Technical Entry Scheme; and (b) Special Commissioned Officers.

The OTA, Gaya, also imparts training to gentlemen cadets from friendly countries.

National Cadet Corps

The National Cadet Corps (NCC) was established in 1948 as an Indian military cadet corps. It is a tri-services organisation open to school and college students. It has completed 69 years of its existence. The NCC strives to provide the youth of the country opportunities for all-round development with a sense of commitment, dedication, self-discipline and moral values, so that they become responsible citizens and can take their place in all walks of life in the service of the nation. The motto of NCC is ”Unity and Discipline”. The total sanctioned strength of NCC cadets is 15 lakh. This includes two lakh NCC cadet strength sanctioned in the year 2010 that is being absorbed in five phases @ 40,000 cadets per year. NCC’s presence extends to 703 out of 716 districts in the country covering 16,288 institutions.

The enrolment policy of Senior Division/Senior Wing cadets has been changed from 2 years to 3 years. It would result in improvement in training standards and quality output of cadets. NCC has been introduced as an additional/ elective subject in classes X and XII. This would make NCC more attractive and cadets would be able to score credit points in their academic results.

Website : www.nccindia.nic.in

Sainik Schools

The Sainik Schools were established as a joint venture of the central and state government. These are under the overall governance of Sainik Schools Society. At present, there are 26 Sainik Schools located in various parts of the country. The objectives of Sainik Schools include bringing quality public school education within the reach of the common man, all-round development of a child’s personality and to remove regional imbalance in the officer’s cadre of the Armed Forces. The Sainik Schools have shown an upward trend in the number of cadets joining the National Defence Academy in keeping with the primary aim of establishing of Sainik Schools to prepare boys academically, physically and mentally for entry into the National Defence Academy.

Rashtriya Military Schools

There are five Rashtriya Military Schools in the country at Belgaum and Bengaluru in Karnataka, Chail in Himachal Pradesh and Ajmer and Dholpur in Rajasthan. These schools are CBSE affiliated fully residential public schools which function under the aegis of Ministry of Defence. Boys are admitted in Class VI and Class IX based on the results of Common Entrance Test. About 70 per cent seats are reserved forwards of JCOs/ORs of Army, Navy and Air Force (including ex-servicemen) and balance 30 per cent for wards of officers of Army, Navy and Air Force (including retired officers) and wards of civilians. Atotal of 50 seats are reserved for wards of service personnel killed in action. About 15 per cent and 7.5 per cent seats are reserved for SC and ST respectively in all categories.

Website: www.rashtriyamilitaryschools.in

Rashtriya Indian Military College

Rashtriya Indian Military College (RIMC) was established in 1922 with the objective of providing necessary preliminary training for boys of Indian birth or domicile, wishing to become officers in the Armed Forces of India. The institution now serves as a feeder institute to the National Defence Academy. Selection for RIMC is through an All India Entrance Examination comprising a written examination and viva voce. Seats for different states are reserved based on their population. The college admits boys in Class VIII. About 25 cadets are admitted in each term twice a year (January and July) on the basis of All India Entrance Examination without any reservation.

Website: www.rimc.gov.in

College of Military Engineering

The College of Military Engineering (CME) at Pune is a premier technical institution conducting training for personnel of the Corps of Engineers, other Arms and Services, Navy, Air Force, Para Military Forces, Police and Civilians, besides, personnel from friendly foreign countries. CME is affiliated to Jawaharlal Nehru University (JNU) for the award of B.Tech. and M.Tech. degrees. All India Council for Technical

Education (AICTE) also recognises the graduate and postgraduate courses run by the CME.

Defence Production

Department of Defence Production was set up in 1962 with the objective of developing and promoting the industrial base for production of weapons, equipment, platforms and materials required by armed forces for defence of the country. Over the years, the Department has established wide range of production facilities for various defence equipment through the Ordnance Factories and Defence Public Sector Undertakings (DPSUs). The products manufactured include arms and ammunition, tanks, armoured vehicles, heavy vehicles, fighter aircraft and helicopters, warships, submarines, missiles, ammunition, electronic equipment, earth moving equipment, special alloys and special purpose steels.

The Department promulgated Defence Production Policy which aims at achieving substantive self-reliance in design, development and production of equipment/weapon systems in a scheduled time-frame.

Ordnance Factories

The Indian Ordnance Factories organisation - a family of 41 ordnance factories under the aegis of its corporate headquarters Ordnance Factory Board, Kolkata-possesses the unique distinction of over 200-year experience in defence production. The organisation is engaged in production, testing, logistics, research, development and marketing of a comprehensive product range in the area of land, sea and air systems. Indian Ordnance Factories is the oldest and largest industrial setup which functions under the Department of Defence Production. The ordnance factories form an integrated base for indigenous production of defence hardware and equipment, with the primary objective of self-reliance in equipping the armed forces with state-of-the-art battlefield equipment.

Ordnance Factory Board (OFB) is working on a number of R&D projects, to provide state-of-the-art battlefield equipment and ammunition to the services. These include bi-modular charge system for 155mm x 45 calibre ‘Dhanush’ Gun Armament Upgrade of BMP-II etc. OFB along with DRDO is working on various R&D projects to enhance

self-reliance in important arms and ammunitions required by the Forces, 7.62 x 51 mm Assault Rifle, Protective Carbine, under Barrel Grenade Launcher Ammunition etc. Besides this, 13 Ordnance Development Centres of OFB are engaged in development of futuristic requirements of the Forces such as 'Futuristic Infantry Combat Vehicle', 'Air Defence Gun for Army', and 'Mounted Gun System', for which OFB has associated with NTs and other institutions of repute for indigenous development of technologies and products.

Website : www.ofbindia.gov.in

Defence Undertakings

Hindustan Aeronautics Limited: Hindustan Aeronautics Limited (HAL), established in 1940, is a premier aeronautical company of Asia. HAL, a Navratna DPSU with 20 production divisions and 11 R&D centers, spread across the country in nine geographical locations. HAL's expertise encompasses design and development, production, repair, overhaul and upgrade of aircraft, helicopters, aero-engines, accessories, avionics and systems. HAL is providing maintenance support to Indian Defence Services for all the fleet supplied by HAL including fleet such as HS-748, Cheetah/Chetak, etc, for which OEMs have discontinued their support. The Company also supports non-HAL produced aircraft and engines like Mirage 2000, An-32, Seaking helicopter modules, Gnome engine, TM-333 2B2 Engine etc. HAL's maintenance support to the Indian Army and Coast Guard is 100 per cent of their fleet and in respect of Indian Air Force and Indian Navy it is 75 per cent and 61 per cent. HAL has positioned itself as a comprehensive solution provider to the Indian Defence Services for aviation requirements that include trainer, fighter, transport aircraft and light helicopters.

Website: www.hal-india.co.in

Bharat Electronics Limited: Bharat Electronics Limited (BEL), a Navratna PSU, was established in 1954. BEL has nine manufacturing units across India. The company has core competency in areas of Defence Communications, Radars & Missile Systems, Sonars & Fire Control Systems, Electronic Warfare and Avionics Systems, Network Centric Systems, Electro-Optics, Tank Electronics, Home Land Security etc. Around 88 per cent of turnover comes from these business segments. In the non-defence area, BEL manufactures Electronic Voting Machines

(EVMs), Tablet PCs (BEL designed), Doppler Weather Radars, large variety of components like integrated circuits, hybrid micro circuits, semiconductor devices, solar cells, etc. Apart from these, BEL also has presence in the areas of Access Control systems and select non-defence applications.

Website: www.bel-india.in

BEML Limited: Bharat Earth Movers Limited (BEML), incorporated in 1964, is a Mini-Ratna (Category-I) Public Sector Undertaking, under the Ministry of Defence engaged in the design, development, manufacturing and after-sales service of a wide range of products for core sectors of economy such as coal, mining, steel, cement, power, irrigation, construction, road building, Defence, Railway and Metro transportation system and Aerospace. BEML operates in three business segments—mining and construction, defence and aerospace, rail and metro and international business division for export activities.

Website: www.bemlindia.in

Bharat Dynamics Limited: Bharat Dynamics Limited (BDL), a Mini-Ratna Category-I Company, was incorporated in 1970 under the Ministry of Defence. A pioneer in the manufacture of Anti-Tank Guided Missiles (ATGM), today, BDL has evolved as a conglomerate manufacturing ATGMs of latest generations, Surface-to-Air weapon systems, strategic weapons, launchers, underwater weapons, decoys and test equipment. Refurbishment and life extension of vintage missiles in line with the requirement of armed forces is also being done to enhance the value with retention of quality.

Website: www.bdl-india.in

Mazagon Dock Shipbuilders Limited: Mazagon Dock Shipbuilders Limited (MDL) is a leading Defence PSU established as public limited company in 1934. The company was taken over by the Government of India in 1960 with the aim of building indigenous warships. MDL has built and delivered various types of warships like destroyers, frigates, missile corvettes, missile boats and submarines besides commercial vessels and rigs/platforms for ONGC.

The company has upgraded and augmented its warship construction facilities in this regard; added new facilities of additional production line; and module workshop and wet basin have been created as part of the

modernisation plan. The new assembly workshop has been developed for submarine construction.

Website : www.mazagondock.in

Garden Reach Shipbuilders and Engineers Limited: Garden Reach Shipbuilders and Engineers Ltd (GRSE), a Mini-Ratna Category-I Company, was incorporated as a Defence PSU in 1960. Over the years, GRSE has established well-proven capabilities for in-house ship design/ shipbuilding and has made significant contribution to the success of the indigenous warship construction programme. It has emerged as a leading shipyard, building a wide array of vessels, from the state-of-the-art fast attack crafts to world class stealth frigates. Apart from shipbuilding and ship repair, GRSE has also diversified into engineering business with product profile of diesel engines, various deck machinery and pre-fabricated steel bridges. The shipyard has modernised its diesel engine plant recently and has tied up with MTU Germany to indigenise manufacturing of marine engines.

Website : www.grse.in

Goa Shipyard Limited: Goa Shipyard Limited (GSL) is a Mini-Ratna Group - I status company and is capable of indigenously designing and building high technology and sophisticated ships to meet the crucial maritime security needs of the country. For over four decades, GSL has designed and built wide ranges of sophisticated vessels for defence commercial sectors with special expertise in building modern patrol vessels of steel and alumimum hull. GSL product range includes Offshore Patrol Vessels (OPVs), fast patrol vessels, missile boats, survey vessels, landing craft utility vessels and other auxiliary vessels. It has also successfully ventured into building Glass Reinforced Plastic (GRP) Interceptor boats.

Website : www.goashipyard.in

Hindustan Shipyard Ltd: Hindustan Shipyard Ltd (HSL) was set up originally in 1941 by Seth Walchand Herachand to promote indigenous shipbuilding industry. The shipyard was transferred to Ministry of Defence in 2010. The shipyard has very good infrastructure and potential of emerging as leading shipyard on the eastern coast. HSL has been entrusted for undertaking construction of various vessels including patrol vessels, repair of submarine, etc. Since inception, the shipyard has built

179 ships. HSL is located on the east coast of the country and is nation's premium shipbuilding and ship submarine repair organisation.

Website : www.hslvizag.in

Mishra Dhatu Nigam Ltd: Mishra Dhatu Nigam Limited (MIDHANI) was set up in the early 1970s initially to manufacture critical materials required in the strategic sectors of India's defence industry. MIDHANI manufactures superalloys, titanium alloys, special steels, magnetic alloys in various forms like cast ingots, forgings, hot rolled and cold rolled rods, wire, sheets and strips, near net shapes, investment castings and industrial fasteners. As part of its CSR activity, it also manufactures biomedical implants for the needy patients.

Website : www.midhani-india.in

Directorate General of Quality Assurance: Directorate General of Quality Assurance (DGQA) is responsible for quality assurance of all defence stores and equipments, both indigenous as well as imported for the army, navy (excluding Naval Armaments) and common user items for the air force procured from ordnance factories, public sector undertakings and private sector. It has a vital role to play in defence preparedness of the country. DGQA carries out detailed technical evaluation of weapons and equipment before these are inducted in the army. There is a paradigm shift in role of DGQA from quality audit to quality management and process audit of the manufacture with a view that a controlled system would give quality product automatically.

Website: www.dgqadefence.gov.in

Directorate General of Aeronautical Quality Assurance

Directorate General of Aeronautical Quality Assurance (DGAQA) is the quality assurance (QA) regulatory authority for military aviation stores for IAF, army aviation, naval aviation and Indian Coast Guard. It provides QA coverage to military aircraft, helicopter, associated accessories, air armaments, unmanned aerial vehicles (UAV), missiles, etc. during design, development, production, overhaul, repair, upgradation and modification at various defence PSUs, ordnance factories, DRDO labs, oil refineries, private trade firms, etc. DGAQA also plays vital role in technical evaluation, field trials, pre-dispatch inspection (PDI) during foreign procurement of military aviation stores.

Website: www.dgaeroqa.gov.in

Directorate of Standardisation

The Directorate of Standardisation (DoS) came into existence in 1962 to contain proliferation of defence inventory of the three services and to reduce it to optimum level by establishing commonality in equipment/components which is progressively achieved through formulation of varied standardisation documents, codification of items and entry control.

Website: www.ddpdos.gov.in

Directorate of Planning and Coordination

The Directorate of Planning and Coordination, an attached office of Department of Defence Production, was established in 1964. The Directorate is primarily mandated to promote indigenisation in defence sector through various enabling policies viz. 'Make in India' initiative; liberalisation of FDI Policy; Industrial licensing policy; providing level playing field to private sector, and giving preference to procurement from the indigenous route. The Directorate is responsible to maintain and update the 'Make in India' portal on defence website. The Directorate strives to foster international cooperation in defence sector and boost export of defence equipment to other countries. In addition, the Directorate renders advice from DDP's perspective on capital acquisition proposals of Service Headquarters and also plays significant role in streaming of Defence Procurement Procedure (DDP). It also plays a key role in the ongoing modernisation of shipyards.

National Institute for Research and Development in Defence Shipbuilding

National Institute for Research and Development in Defence Shipbuilding (NIRDESH) was set up at Kozhikode, Kerala, with the objective of achieving self-reliance in shipbuilding. The Institute has been envisaged as a Centre of Excellence for India's futuristic shipbuilding programmes. The thrust areas of NIRDESH would be R&D, ship design, technology development and training along with industry interfacing, training and project management.

Research and Development

Defence Research and Development Organisation (DRDO) is the research and development arm of the Ministry of Defence. It was created in 1958 by merging the units of Defence Science Organisation, which was set up in 1948 to advise and assist the Defence Services on scientific problems and to undertake research in areas related to defence, with the then existing Technical Development Establishments of the three Services. Subsequently, a separate Department of Defence Research and Development (DDR&D) was formed in 1980 to improve administrative efficiency. Starting from a cluster of about 10 laboratories in 1958, DRDO today has 46 laboratories which are spread far and wide: from Tezpur in the east to Mumbai in the west, from Leh in the north to Kochi in the south. DRDO's mandate is to provide assessment and advise on scientific aspects of weapons, platforms and surveillance sensors; to carry out research and to develop cutting-edge technologies, leading to the production of state-of-the-art sensors, weapon systems, platforms and allied equipment for our Defence Services.

In the recent past, the mandate has been widened to support national cyber security architecture which includes testing capabilities, security solutions, networking systems and cyber defence tools. In this process, it has also established national infrastructure, enhanced defence industrial capability and developed committed quality human resources.

DRDO is headed by the Scientific Adviser to Raksha Mantri, who is also the Secretary, Department of Defence Research and Development and Director General R&D (DGR&D). Based on the R&D work carried out by the 46 laboratories of DRDO, they are grouped into seven technology clusters namely, Armament and Combat Engineering Systems (ACE); Aeronautical Systems (AERO); Missiles and Strategic Systems (MSS); Naval Systems and Materials (NS and M); Electronics and Communication Systems (ECS); Micro Electronic Devices and Computational Systems (MED and CoS); and Life Sciences (LS).

Human Resources

Being a mission mode organisation, DRDO follows a dynamic system of manpower planning. Authorisation is reviewed after every two years to meet the contingent requirements on account of the workload and new

projects undertaken by the laboratories. The organisation optimally utilises manpower through dynamic manpower management system. To keep the organisation young and energetic and also to fill deficiencies created on account of retirement and superannuation, scientists are being inducted every year as required by the laboratories. DRDO follows online receipt of applications under all recruitment and assessment activities thereby discontinuing the offline/ paper application in DRDO. It has a total strength of 25,966 employees, out of which 7,574 are in Defence Research and Development Service (DRDS), 9,643 in Defence Research and Technical Cadre (DRTC) and 8,775 are in Administration and Allied Cadre.

The DRDO ensures training to all cadres of personnel through training institutes, like DIAT, Pune (for technical courses); ITM, Mussoorie (for techno-managerial programmes); and Defence Laboratory, Jodhpur (for technical, administrative and allied cadre). Every year, few selected scientists are deputed to undergo M.E./ M.Tech./ Ph.D. at Indian Institute of Technology (NT), Indian Institute of Science (MSc) or other reputed Indian universities under the sponsorship programme. A targeted training centre has been set up at Dr Raja Ramanna Complex, Bangalore, for DRDO scientists. Continuing Education Programme (CEP) is also a part of DRDO annual training schedule.

Resettlement of Ex-Servicemen

The Department of Ex-Servicemen Welfare (DESW) formulates various policies and programmes for the welfare and resettlement of Ex-Servicemen (ESM) in the country. The Department has two divisions viz.: Resettlement and Pension, and 3 Attached Offices namely Kendriya Sainik Board Sectt (KSB Sectt), Directorate General (Resettlement) (DGR) and Central Organisation, and Ex-Servicemen Contributory Health Scheme (CO, ECHS).

Kendriya Sainik Board

Kendriya Sainik Board (KSB) Sectt is the apex body of Government of India, which is responsible for implementing government policies for welfare of war-widows/disabled soldiers, ESM and their dependents. It is assisted in its task by 32 Rajya Sainik Boards and 392 Zila Sainik Boards.

The Armed Forces Flag Day Fund (AFFDF) is the major source for providing financial assistance to needy war widows/disabled, ESM and their dependents.

Website : www.ksb.gov.in

Directorate General of Resettlement

Directorate General of Resettlement (DGR) is a tri-service organisation, which looks after various aspects of resettlement and offers multifarious avenues of Employment, Self Employment and Training to Officers, JCOs/OR and their equivalents in other services as well as widows and dependents. Nearly 60,000 Armed Forces' personnel retire or are released from active service every year, most of them being in the comparatively younger age bracket of 35 to 45 years and need a second career to support their families. These personnel constitute a valuable, disciplined, well-trained, dedicated and talented pool available for nation building.

Website : www.dgrindia.com

Training Programmes

DGR is entrusted with the responsibility of preparing retiring/retired service personnel for a second career. These resettlement courses are selected with a focus on employability of ESM in society.

Officers' Training: For training of ESM (Officers), the Resettlement Training Programmes are conducted including: 24 Weeks Management Courses at IIMs and other reputed B-Schools; Modular Management courses like Project Finance; Academic Institutions; Supply Chain; Retail; Human Resource; Facility; Export & Import; Event Six Sigma; Jet Transition and Seafaring, etc. at other reputed institutes. Besides, specially designed six-week course on Corporate Security and Safety have been in existence for officers looking to venture into self-employment fields such as security agencies. About 60 per cent course fee is paid by DGR Widows of officers are also eligible to undergo these courses.

JCOs/OR and Equivalent Training: For JCOs/ ORs and equivalent, the training courses are conducted for a duration up to one year in diverse fields, such as Security; Fire and Industrial Safety; Computer and IT

including ‘O’ Level; Hospitality; Tourism; Agri based; Business Management; Modular Management; Vocational and Technical; Medical & Healthcare and Library and Information Science, etc. These courses are also run at reputed institutes of accreditation. Cent per cent course fee is paid by DGR Widows/one dependent of JCOs/OR are also eligible to undergo any course sponsored by DGR ESM are now also entitled to apply for regular DGR training, which are not fully subscribed by retiring personnel. The move of allowing ESM to attend regular DGR courses is aimed to benefit all those ex-servicemen who have not done any resettlement course in the past and are desirous to do these courses to hone their skill. At least two courses are planned every month at all the Regimental Centres to provide variety of courses to the retirees on pension drill.

ESM Training: Under this scheme, funds are allotted to RSBs for conducting vocational training for ESM in their states. The scheme is primarily meant for those ESM who could not avail the facility of resettlement training while in service.

Employment Opportunities

Reservation in Government Jobs: The central government has provided for the following reservation for ESM for vacancies in the posts to be filled by direct recruitment: (a) 10 per cent in Group ‘C’ posts and 20 per cent in Group ‘D’ posts. In addition, 4.5 percent reservation in each category is meant for disabled soldiers and widows/dependents; (b) 14.5 per cent in Group ‘C and 24.5 per cent Group ‘D’ posts in PSUs and nationalised banks; (c) 10 per cent posts up to Assistant Commandants in paramilitary forces; and (d) cent per cent in Defence Security Corps.

Implementation of Reservation: The government has designated Directorate General Resettlement as the nodal agency for the monitoring implementation of reservation policy for ESM. Half yearly report for the period ending June 30, 2015, has been compiled based on data received from various organisations.

Job s *in the Corporate/Private Sector:* Substantial employment for ESM can be generated in the private/corporate sector. In order to generate awareness and urge these sectors to employ ESM, a National Corporate Conclave was conducted by DGR in August 2014 where the competence of the ESM were presented to Corporate Heads and the Raksha Mantri

urged them to open the employment opportunities for ESM. DGR has signed a MoU with Confederation of Indian Industries (CM) towards this end.

Schemes for Self Employment

Coal Transportation Schemes and Tipper Attachment: This scheme has been re-energised by issue of new MoU and guidelines in July 2014.

Company Owned Company Operated Retail Outlets: In accordance with the policy guidelines issued by the Ministry of Petroleum and Natural Gas, DGR sponsors officers for management of Retail Outlets of IOCL, BPCL and HPCL all over India under the Company Owned Company Operated (COCO) Schemes.

Gopaljee Dairy and Fresh Farm: The scheme aims at providing self-employment to JCOs/ ORs in the National Capital Region (NCR).

Management of CNG Stations by ESM in NCR: The scope of the scheme has been extended to cover entire NCR to include Noida, Faridabad and Gurugram.

Allotment of Army Surplus Class V 'B' Vehicles: Ex-Servicemen and widows of defence personnel, who died while in service, are eligible to apply for allotment of Army Surplus Class V 'B' Vehicles. About 75 ESM were registered with DGR during the year.

Oil Product Agencies Scheme: In accordance with the policy guidelines issued by the Ministry of Petroleum and Natural Gas/Oil Company, DGR is mandated to issue eligibility certificates for allotment of oil product agencies under the 8 per cent defence quota.

Healthcare

Ex-Servicemen Contributory Health Scheme: Ex-Servicemen Contributory Health Scheme (ECHS) was launched in 2003. The scheme was expanded in October 2010. ECHS aims to provide quality healthcare to Ex-Servicemen (ESM) and their dependents through a network of ECHS polyclinics, service medical facilities and civil empanelled/government hospitals spread across the country. The scheme has been structured on the lines of Central Government Health Scheme (CGHS) and is financed by the Government of India. Endeavour is to ensure cashless treatment by utilising the empanelled hospitals for the veterans and their dependents.

ECHS Polyclinics are designed to provide 'Out Patient Care' that includes consultations, essential investigation and provision of medicines. Specialised consultations, investigations and 'In Patient Care' (Hospitalisation) is provided through spare capacity available in service hospitals, all government hospitals and also through civil medical facilities empanelled with ECHS.

Central Organisation: At the apex level is the Central Organisation, ECHS located in Delhi, which functions under the Chiefs of Staff Committee through the Adjutant General in the Integrated Headquarters of Ministry of Defence (Army). The Central Organisation is headed by a serving Major General. Executive control of ECHS is vested with Department of Ex-Servicemen Welfare.

ECHS Toll-Free Helpline: ECHS Toll-free Helpline has been made available for all ECHS members at 1800-114-115 for resolving queries on membership, treatment and employment. The service is available from Monday to Friday on all working days from 0900-1700 hours.

ECHS Website: All information regarding ECHS, including list of empanelled facilities, forms for membership and latest policies, etc. are available on www.echs.gov.in.

Combating Covid-19

In Central Organisation Ex-Servicemen Contributory Health Scheme (COECHS), all polyclinics are working with 100 per cent medical staff being part of essential medical services. All relevant advisories on Covid-19 have been disseminated to regional centres and polyclinics for information, awareness and implementation and posted on the ECHS website, www.echs.gov.in. Wide publicity is being given to download the Arogya Setu app.

Provisions have been made for purchase of medicines by veterans with chronic ailments on long treatment from the market on reimbursement basis to promote social distancing and avoid unnecessary exposure. Relaxations have been given to all private empanelled hospitals for minimum period of intimation of admission, uploading of claims and Need More Information (NMI) settlement. Provisions have been made for approvals by specialist/Senior Executive Medical Officer (SEMO) to be given by email/ fax. No referral is required by the veterans in case of follow-up treatment of cancer. Expeditious payments of

outstanding bills of private empanelled hospitals with preference to Covid-19 designated hospitals is being made. It has been decided to reimburse the actual cost of pulse oximeter (subject to a ceiling of ₹ 1,200) to those ECHS beneficiaries who have tested positive for Covid-19, subject to one oximeter per family.

Kendriya Sainik Board (KSB) is coordinating with all the Rajya Sainik Boards (RSBs) and Zila Sainik Boards (ZSBs) and has identified 1,80,000 ex-servicemen across the country as useful human resources for capacity building at state/ district level. Besides this, a number of local Ex-Servicemen Associations are providing masks, donating blood, helping in community kitchens and providing ration to poor and migrant labourers in the states/UTs of J&K, Uttarakhand, Uttar Pradesh, Jharkhand, Tripura, Assam, Chhattisgarh, Karnataka, Andhra Pradesh, Telangana and Puducherry, on voluntary basis. Three ex-servicemen doctors have been assisting Gautam Budh Nagar district administration on voluntary basis.

ESM Grievances during Lockdown

A Nodal Officer was nominated to handle grievances arising out of extraordinary situations due to Covid-19 lockdown, with his name, e-mail and mobile number uploaded on the webpage. Atotal of 69 online and 18 telephone grievances were received till August 2020. These were on the situation having arisen due to restrictions on movement and treatment of Covid-19 positive cases. Due to the lockdown, because the defence personnel who had retired but could not move out, the Air Force and Naval authorities were requested to extend period of retention of government accommodation.

Defence Pensions

Pension to approximately 32 lakh defence pensioners/family pensioners is disbursed through 21 public sector banks; 3 private sector banks; 308 treasuries; 64 Defence Pension Disbursing Offices (DPDOs); 1 post office; 5 Pay and Accounts Offices (PAOs) scattered all over India. For the Armed Forces Pensioners residing in Nepal, disbursement of pension is done through 3 Pension Payment Offices (PPOs).

10 Education

THE essence of human resource development is education, which plays a significant and remedial role in balancing the socio-economic fabric of the country. Since citizens of India are its most valuable resource, the billion-strong nation needs the nurture and care in the form of basic education to achieve a better quality of life. This warrants an all-round development of the citizens, which can be achieved by building strong foundations in education. Good quality education is the foundation of new discoveries, new knowledge, innovation and entrepreneurship that trigger growth and prosperity of the individual as well as that of a nation.

To lay emphasis on the educational development of students of weaker sections of the society, a number of innovative initiatives have been taken by the Ministry of Education, such as (i) setting up of national monitoring committee on minorities; (ii) setting up of national monitoring committee for education of SCs, STs and persons with disabilities; (iii) student support initiatives such as National Means-cum-Merit Scholarship Scheme (NMMSS), National Scheme of Incentive to Girls for Secondary Education (NSIGSE), Special Scholarship Scheme for Jammu and Kashmir, scheme of interest subsidy on educational loans; (iv) regulations on prevention of discrimination and estasblishment of ombudsman; and (v) development of an anti-ragging web portal for the all-round development of our children, which can be achieved by building strong foundations in education. In pursuance of this mission, the Ministry of Education was created in September, 1985, through the 174th amendment to the Government of India (Allocation of Business) Rules, 1961. Currently, the Ministry works through two departments: (i) Department of School Education and Literacy; and (ii) Department of Higher Education.

While the Department of School Education and Literacy is responsible for development of school education and literacy in the country, the Department of Higher Education takes care of what is one of the largest higher education systems of the world, just after the United States and

China. The Department of School Education and Literacy focuses on the universalisation of education and making better citizens out of our young population. For this, various new schemes and initiatives are taken up regularly and recently, those schemes and initiatives have also started paying dividends in the form of growing enrolment in schools.

The Department of Higher Education, on the other hand, is engaged in bringing world-class opportunities of higher education and research to the country so that Indian students are not found lacking when facing an international platform. For this, the government launched joint ventures and signed MoUs to help Indian students benefit from international exposure and opinion. The main objectives of the Ministry are: formulating the National Policy on Education and to ensure that it is implemented in letter and spirit; planned development including expanding access and improving quality of the educational institutions throughout the country, mainly in regions where people lack easy access to education; paying special attention to disadvantaged groups like the poor, females and the minorities; provide financial help in the form of scholarships and loan subsidies to deserving students from deprived sections of the society; and encouraging international cooperation in the field of education, including working closely with the UNESCO and foreign governments as well as universities, to enhance the educational opportunities.

The Right of Children to Free and Compulsory Education and Sarva Shiksha Abhiyan

Article 21-A of the Constitution of India and its consequent legislation, the Right of Children to Free and Compulsory Education (RTE) Act, 2009 became operative in the country in 2010. The RTE Act confers the right to elementary education on all children, in the age group of 6-14 years, on the basis of equality of opportunity in a formal school which satisfies certain essential norms and standards. All states and UTs have notified their state RTE rules. The centrally sponsored scheme of Sarva Shiksha Abhiyan (SSA) supports states and UTs in their efforts to implement the RTE Act. Its interventions include, inter alia, opening of new schools; construction of schools and additional classrooms; constructing toilets and drinking water facilities; provisioning for

teachers; in-service training for teachers and academic resource support; free textbooks and uniforms; support for improving learning achievement levels; research; and evaluation and monitoring.

National Education Policy

National Education Policy, 2020 (NEP 2020) is the first policy of the 21st century, and has come after 34 years, replacing the New Education Policy of 1986. Built on the foundational pillars of access, equity, quality, affordability and accountability, this policy is aligned to the 2030 Agenda for sustainable development. It aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic and flexible. The Policy also lays emphasis on bringing out the unique capabilities of each student, promoting ethical values, encouraging critical thinking, fostering a culture of research and encouraging rootedness and pride in India.

An important feature of the Policy is the unprecedented consultation process at every stage - from pre-formulation to formulation and implementation.

Salient features

The salient features of the policy include:

NEP 2020 emphasises on ensuring universal access to school education at all levels: pre-school to secondary. The target is to raise gross enrolment ratio in school education to 100 per cent by 2030. About two crore out-of-school children are to be brought back into the mainstream under the policy. NEP 2020 lays emphasis on early childhood care and education, where the 10+2 structure of school curriculum is to be replaced by a 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively. This will bring the hitherto uncovered age group of 3-6 years under school curriculum. The new system will have 12 years of schooling with three years of Anganwadi/ pre-schooling. NCERT will develop a National Curricular and Pedagogical Framework for Early Childhood Care and Education (NCPFECCE) for children up to the age of 8 years. India_2021_DPD: E published on DPD mobile app

The school curricula and pedagogy aims to ensure holistic development of learners by equipping them with the key 21st century skills, reduction in curricular content to enhance essential learning and critical thinking and greater focus on experiential learning. Students will have increased flexibility and choice of subjects. The policy has emphasised mother tongue/local language/ regional language as the medium of instruction at least till grade 5, but preferably till grade 8 and beyond, as far as possible. Sanskrit will be offered at all levels of school and higher education as an option for students, including in the three-language formula. Other classical languages and literatures of India will also be available as options. No language will be imposed on any student. Students will participate in a fun project/activity on 'The Languages of India', sometime between grades 6 and 8, such as under the '*Ek Bharat Shrestha Bharat'* initiative. Several foreign languages will also be offered at the secondary level. Indian Sign Language (ISL) will be standardised across the country, and national and state curriculum materials will be developed for students with hearing impairment.

Teachers will be recruited through robust and transparent processes. Promotions will be merit-based, with a mechanism for multi-source periodic performance appraisals and available progression paths to become educational administrators or teacher educators. Schools can be organised into complexes or clusters, which will be the basic units of governance and ensure availability of all resources including infrastructure, academic libraries and a strong professional teacher community.

NEP2020 and Higher Education

NEP aims to increase gross enrolment ratio in higher education (including vocational education) to 50 per cent by 2035. GER is currently 26.3 per cent (2018 figures). About 3.5 crore new seats will be added to higher education institutions. The policy envisages broad-based, multi-disciplinary, holistic undergraduate education system allowing creative combinations of subjects (such as mathematics with music and history with painting) and integration of vocational education with mainstream education. Multiple entry and exit will be allowed with appropriate certification. An academic bank of credit will be established for digitally storing academic credits earned from different HEIs so that these can be

transferred and counted towards final degree earned. Higher education institutions will be transformed into large, well-resourced, vibrant multi-disciplinary institutions providing high quality teaching, research, and community engagement.

There will be a single overarching umbrella body - Higher Education Commission of India (HECI) - for entire higher education, excluding medical and legal education. HECI will have four independent verticals: National Higher Education Regulatory Council (NHERC) for regulation, General Education Council (GEC) for standard setting, Higher Education Grants Council (HEGC) for funding, and National Accreditation Council (NAC) for accreditation. HECI will function through faceless intervention through technology, and will have powers to penalise HEIs not conforming to norms and standards. The National Research Foundation will be created as an apex body for fostering a strong research culture and building research capacity across higher education.

A new and comprehensive National Curriculum Framework for Teacher Education, NCFTE 2021, will be formulated by the NCTE in consultation with NCERT. A national mission for mentoring will be established with a large pool of outstanding senior/retired faculty - including those with the ability to teach in Indian languages - who would be willing to provide short and long-term mentoring/professional support to university/college teachers. Efforts will be made to incentivise the merits of students belonging to SC, ST, OBC and other Socio-Economically Disadvantaged Groups (SEDGs). The National Scholarship Portal will be expanded to support, foster and track the progress of students receiving scholarships. Comprehensive recommendations have been made to promote online education in order to ensure preparedness with alternative modes of quality education where traditional and in-person modes of education are not possible.

An autonomous body, the National Educational Technology Forum (NETF), will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration.To ensure the preservation, growth, and vibrancy of all Indian languages, NEP recommends setting an Indian Institute of Translation and Interpretation (IITI), National Institute (or Institutes) for

Pali, Persian and Prakrit, strengthening of Sanskrit and all language departments in HEIs. India_2021_AMAZON: E published on AMAZON

Programme Interventions

I. Universal Access: The Sarva Shiksha Abhiyan (SSA) programme is being implemented since 2001 for universalisation of elementary education. It has made significant progress in achieving near universal access and equity.

(a) New Schools: Progress in achieving the goal of universal access under SSA has been consistent over the years.

(b) Special Training for mainstreaming out-of-school children: The RTE Act makes a specific provision for Special Training for age-appropriate admission for out-of-school children. A majority of out-of-school children belong to disadvantaged communities—scheduled castes; scheduled tribes; Muslims; migrants; children with special needs; urban deprived children; working children; children in other difficult circumstances, for example, those living in difficult terrain; children from displaced families; areas affected by civil strife, etc. Special training may be in the form of residential or non-residential courses organised, preferably in the premises of the school, but if such facilities are not available in school, alternate facilities which are safe, secure and accessible may be identified and used.

(c) Residential facilities: SSA has a provision for residential facilities in sparsely populated or hilly and densely forested areas with difficult geographical terrains and in densely populated urban areas. SSA has provided 826 residential institutions with a capacity of around 90,855 children.

(d) Transportation or Escort facilities: These facilities are available for children in remote habitations with sparse populations or in urban areas where availability of land is a problem or children belonging to extremely deprived groups or children with special needs.

(e) Uniforms: SSA provides two sets of uniform to all girls, SC, ST children and Below Poverty Line (BPL) children, wherever (i) state governments have incorporated provision of school uniforms as a child

entitlement in their state RTE Rules; and (ii) state governments are not already providing uniforms from the state budgets.

II. Bridging Gender Gaps in Elementary Education

(a) Girls' Education: RTE-SSA provides a clear thrust and special focus on education for girls and children belonging to disadvantaged groups and weaker sections. The general interventions under SSA apply to all girls and children belonging to disadvantaged and weaker sections; these include ensuring availability of primary and upper primary schools within the habitation as prescribed under the RTE Rules, uniforms, textbooks, etc. Special Training interventions are also largely focused on girls and disadvantaged groups, because it is this category of children who are most deprived of opportunities to pursue their education.

(b) Kasturba Gandhi Balika Vidyalaya (KGBV): KGBVs are residential upper primary schools for girls from SC, ST, OBC, Muslim communities and BPL girls. KGBVs are set up in educationally backward blocks where schools are at great distances and are a challenge to the security of their girls. KGBVs reach out to adolescent girls who are unable to go to regular schools to out-of-school girls in the 10+ age group who are unable to complete primary school and younger girls of migratory populations in difficult areas of scattered habitations that do not qualify for primary/ upper primary schools. KGBVs provide for a minimum reservation of 75 per cent seats for girls from SC/ST/OBC and minorities and 25 per cent to girls from families that live below the poverty line.

(c) Removal of Gender Bias: Following the National Curriculum Framework (NCF), 2005 guidelines, states have consciously taken a decision to establish gender as a critical marker of transformation through increasing visual representation of girls and women and facilitating role reversal. Most of the states have incorporated the gender sensitisation in their regular School Management Committee (SMC) training modules to deal with issues such as enrolment, retention and completion of education of girls; creating suitable atmosphere for girl students in schools; rapport with female teachers for discussing gender awareness, etc. Trainings of teachers on gender related issues are organised in the states specifically for orientation on gender issues facing adolescent girls in particular.

(d) Digital Gender Atlas for Advancing Girls' Education: Department of School Education and Literacy has prepared a Digital Gender Atlas for advancing girls' education in the country on its website. The tool, which has been developed with the support of UNICEF, will help identify low performing geographic pockets for girls, particularly from marginalised groups such as scheduled castes, scheduled tribes and Muslims, on specific gender related education indicators. In order to plan and execute educational interventions, the purpose of the Gender Atlas is to help identify and ensure equitable education with a focus on vulnerable girls, including girls with disabilities.

(e) Separate Girls' Toilets: Under SSA, the requirement of school infrastructure facilities including toilets and drinking water are worked out by the state, based on need at school/village/block and district levels. All new schools sanctioned under SSA are composite schools with facilities like separate toilets for boys and girls.

III. Inclusive Education

(a) Children with Special Needs

RTE-SSA seeks to ensure that every child with special needs, irrespective of the kind, category and degree of disability, is provided meaningful and quality education. The main components of SSA interventions for such children include identification, functional and formal assessment, appropriate educational placement, preparation of individualised educational plan, provision of aids and appliances, teacher training, resource support, removal of architectural barriers, monitoring and evaluation and a special focus on girls with special needs.

(b) Textbooks for Children

All children are provided free textbooks up to Class VIII. In 2016-17, provision was made for providing textbooks to 8.38 crore children. Concomitantly, workbooks and worksheets are being provided by several states, to facilitate activity-based classroom processes and to supplement learning processes.

IV. Sub-Programmes under SSA

(a) The Padhe Bharat Badhe Bharat (PBBB), a sub-programme of the SSA, in Classes I and II, is focusing on foundational learning in early grades with an emphasis on reading, writing and comprehension and

mathematics. States and UTs have been implementing specific interventions like ABL in Tamil Nadu, Nalli Kali in Karnataka and Pragya in Gujarat. Steps have been taken to develop specific teacher training modules for teachers teaching students in Classes I and II. Punjab, Meghalaya and Delhi have introduced programmes for strengthening teaching of maths in Classes I and II; in Sikkim, schools have set up reading corners for children in the foundational classes through support from community members.

(b)The Rashtriya Aavishkar Abhiyan (RAA), also under the SSA, aims to motivate and engage children of the age group 6-18 years, in science, mathematics and technology by observation, experimentation, inference drawing and model building, through both inside and outside classroom activities. Schools have been adopted for mentoring by institutions of higher education like IITs, IISERs and NITs.

(c) Vidyanjali, another sub-programme under SSA, was launched to enhance community and private sector involvement in government-run elementary schools across the country. The aim of the programme is to strengthen implementation of co-scholastic activities in government schools through services of volunteers.

(d)*ShaGun portal - an initiative to monitor the implementation of SSA:* Ministry of Education has developed a web portal called ShaGun. It aims to capture and showcase innovations and progress in elementary education sector by continuous monitoring. ShaGun will help monitor progress by assessing performance of states and UTs on key parameters and thereby serve as a platform for the central government for effective planning and deliver on the promise of providing quality education to all. ShaGun, which has been coined from the words ‘Shala’ meaning schools and ‘Gunvatta’ meaning quality, has been developed with a twin track approach. It has an online monitoring module to measure state-level performance and progress against key educational indicators. It has been developed to collect and report data which will enable the government and administrators to track the efficiency with which SSA funds are being utilised and the results that this is delivering. The SSA ShaGun web portal can be accessed at http://ssashagun.nic.in.

V. Teacher Training

(a) Availability of Teachers: To meet the shortage of teachers in elementary schools, 19.49 lakh additional posts have been sanctioned under SSA up to 201617. After RTE it is mandatory that only those people may be appointed as teachers who are able to clear TET. CBSE has conducted eleven rounds of Teacher Eligibility Tests (TETs). Apart from these 2.34 lakh part-time instructors have also been sanctioned under SSA.

(b) In-service Teacher Training: To upgrade skills of teachers, SSA provides for annual in-service training up to 20 days for all teachers. Support of ₹ 6,000 per teacher per year is provided for two years to untrained teachers, already employed for the NCTE recognized training programme. Apart from this, induction training for 30 days is given to freshly trained recruits. All training programmes cover pedagogical issues, including content and methodology, aimed at improving teaching learning transactions in classrooms and learning process in schools. Some of the major focus areas include guiding principles of NCF 2005; CCE; how children learn; subject-specific content or learning difficulties; activity-oriented methods; use of TLMs or learning kits, etc.

(c) Training of Headmasters: In order to orient the teachers in managerial skills, the heads of the schools are provided training for 10 days in academic, financial and human resource management.

(d) Distance Education Programmes for Teachers: Capacity building of institutions and personnel at the national, state, district and sub-district levels is being facilitated with assistance of IGNOU and other teacher education institutions in different states. The distance education programme provides technical and academic support in designing, developing, producing and delivering distance learning inputs and materials training of untrained teachers, thus facilitating training of professionally untrained teachers in the states.

VI. Academic Support System

(a) *Academic Support Structures:* About 6,759 Block Resource Centres (BRCs) and 76,064 Cluster Resource Centres (CRCs) have been set up across the country as resource centers in each block and cluster, to provide decentralised academic support, training and supervision to teachers and schools.

(b)*School and Teacher Grants:* SSA also provides annual teacher grants of ₹ 500 to all teachers for developing contextual teaching aids. DIETs and BRCs hold regular workshop and training programmes to develop subject and topic related low cost teaching aids. In addition, an annual school grant of ₹ 5,000 is provided to each primary and ₹ 7,000 to each upper primary school separately, to meet the cost of school consumables, and ₹ 7,500 per school is given to each school for maintenance purposes. For new schools, one-time 'Teaching Learning Equipment' grant @ ₹ 20,000 per new primary school and ₹ 50,000 per new upper primary school is provided for school equipment and setting up expenses.

(c) Computer aided learning: Under SSA, grant up to ₹ 50 lakh is available to each district for strengthening computer aided learning in schools to support enhancement of children's learning. Activities include providing computer equipment or labs to schools, development of curriculum-based e-learning materials in local languages, and training of teachers in computer use. Since inception of the programme, approximately 1,06,753 schools have benefitted from this intervention.

(d) Learning Enhancement Programmes: About 2 per cent of the total SSA outlay for each district has been made available for 'Learning Enhancement Programmes' that aims specifically at improving the quality of learning processes and learning outcomes.

(e) Improving student learning outcomes: The impact of various quality interventions of SSA are reflected in the enhancement of children's learning levels. Being a major thrust area, NCERT launched a programme to measure the achievement level of all children studying in classes III, V and VIII. Improving student learning outcomes has been the key component of SSA.

VII. Infrastructure

RTE-SSA provides flexibility to states in the execution of civil works. Neither designs nor unit costs are centrally prescribed. States are free to evolve building designs based on local site conditions and develop cost estimates based on the state schedule of rates notified by the state governments. School infrastructure provisions, however, is not a stand-alone activity. The design and quality of school infrastructure has a significant impact on enrolment, attendance and retention of children in

schools. Thus 'civil works' under SSA are undertaken to provide all weather building as per provision of RTE Act. RTE-SSA encourages participation by the local community in all civil work activities in order to instil a sense of ownership in them.

RTE-SSA also supports repair of old school buildings, provision of school buildings in respect of building-less, dilapidated schools and retrofitting of school buildings to make them hazard resistant.

VIII. School Management Committees and Community Participation

SSA has always acknowledged the importance of 'community ownership' pertaining to effective functioning of government schools. As per norms, it has been made mandatory for the schools to constitute School Management Committees (SMC) wherein the parents/guardians of students studying in the respective schools are the members.

IX. Monitoring Institutes

Institutions, including university departments of education, social science and institutes of national stature, have been assigned the work of periodic monitoring of SSA implementation in states and UTs. In large states, more than one institute has been assigned the task of monitoring. These monitoring institutes are required to make field visits and report on progress of SSA at the ground level every six months. This cycle is repeated every two years. SSA programme modifies the terms of reference of the monitoring institutes as and when required.

X. Admissions under Section 12(1) (c) of the RTE Act

Section 12(1) (c) mandates all private unaided schools and special category schools to reserve a minimum of 25 per cent of seats for economically weaker sections. Under the SSA, the Government of India will reimburse the state expenditure towards 25 per cent admissions to private unaided schools, based on per child cost norms notified by the state government, subject to a maximum ceiling of 20 per cent of the size of the SSA annual work plan and budget.

DIKSHA

Digital Infrastructure for Knowledge Sharing (DIKSHA), launched in 2017, has achieved several milestones in the field of digital teaching and learning. states and UTs are on board thereby heralding a digital movement in the field of school education in the country. The platform

offers teachers, students and parents with engaging learning material relevant to the prescribed school curriculum. It envisages to accelerate and also to amplify solutions, experiments and innovations that are underway, and are being attempted in the areas of teaching and learning and professional development. DIKSHA provides a platform to create worksheets to assess and monitor the learning outcomes. The worksheets are reviewed by the experts to ensure their relevance before linking them to the relevant chapters in the textbooks. e-pathshala, National Repository of Open Educational Resources (NROER) and similar other portals hosting e-content and digitised text books have been integrated with DIKSHA. Some states (e.g., Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Maharashtra) are already contributing actively in the process of e-content creation and uploading. More than 68,000 pieces of econtent are available on the DIKSHA portal and more than 10.5 crore scans have been effected. Concrete steps are being taken to enhance the coverage of DIKSHA by involving all states and UTs and also to improve the quality of e-material available on the portal.

Rashtriya Madhyamik Shiksha Abhiyan

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) was launched in 2009 with the objective to enhance access to secondary education and improve its quality. The scheme envisages to enhance the enrolment at secondary stage by providing a secondary school with a reasonable distance of habitation, with an aim to ensure GER of 100 per cent and universal retention by 2020. The other objectives include improving quality of education imparted at secondary level by making all secondary schools conform to prescribed norms, removing gender, socioeconomic and disability barriers, etc.

Some of the significant initiatives, under RMSA for improving quality of education are:

(i) Shaala Siddhi: School Standards and Evaluation Framework and its web portal was launched in 2015. It is a comprehensive instrument for school evaluation leading to school improvement. Developed by the National Institute of Educational Planning and Administration (NIEPA), it aims to enable schools to evaluate their performance in a more focused and strategic manner and facilitate them to make professional

judgements for improvement. The programme's objective is to establish an agreed set of standards and benchmarks for each school, by focusing on key performance domains and their core standards.

(ii) Shala Darpan: The Shaala Darpan Project is to cover all the 1,099 Kendriya Vidyalayas. It was launched in June 2015. The objective of this project is to provide services based on school management systems to students, parents and communities. Under school information services, the following list of services will be enabled: school profile management; student profile management; employee information, student attendance; leave management; report cards; curriculum tracking custom; and SMS alerts for parents/administrators on student and teacher attendance.

(iii) GIS Mapping: To ensure universal access to schools, including secondary schools within a reasonable distance of any habitation and without any discrimination, the geographic coordinates of school along with the school information available in Unified District Information System for Education (UDISE) is being uploaded on the school GIS Web enabled platform i.e. http:// schoolgis.nic.in. All states have conducted GIS mapping and shared geographical coordinates of schools with the NIC except Jammu and Kashmir.

(iv)*National Achievement Survey for Class X:* The National Achievement Survey for class X was undertaken for the first time by the Ministry. The survey investigates student achievement in five subjects: English, mathematics, social science, science and modern Indian languages. The test has been administered in 33 states and union territories after a scientific and robust process of sample design, test development and translation, with rigorous adherence to technical procedures.

(v) Kala Utsav: Kala Utsav is an initiative of this Ministry to promote arts (music, theatre, dance, visual arts and crafts) in education by nurturing and showcasing the artistic talent of school students at secondary stage in the country, and it is also a platform to bring arts to the centrestage in an inclusive environment.

(vi) Focus on Science and Maths: Rashtriya Avishkar Abhiyan launched in 2015: Under Rashtriya Avishkar Abhiyan, training of 1.04 lakh science and maths teachers, math and science kit, excursion trip to science

centres and museum for students, special teaching on science and maths, science exhibition at district level, teaching of Vedic Maths, etc., were included under RMSA.

(vii) National Award For Teachers using ICT For Innovation In Education: Under the ICT in schools, to promote computer-enabled learning and usage of ICT in teaching in government and government aided secondary and higher secondary schools, there is a provision for instituting a national award for innovative use of ICT to motivate the teachers and teacher educators for innovative use of ICT in teaching-learning.

Samagra Shiksha

The Department of School Education & Literacy launched an Integrated Scheme for School Education—Samagra Shiksha from 2018-19. It envisages 'school' as a continuun from pre-school, primary, upper primary, secondary to senior secondary levels.

Preference is to be given to Educationally Backward Blocks (EBBs), Special Focus Districts (SFDs), border areas and the aspirational districts identified by NITI Aayog. Allocation for uniforms has been enhanced from ₹150/250 to ₹ 250/400 per child per annum. Improved textbooks have also been introduced.

National Achievement Survey

National Achievement Survey (NAS) assessed the learning levels of the students in Classes III, V, VIII and X: initially, the district report cards were released and later the state learning reports were made available on the website for classes III, V and VIII in May, 2018 and for Class X in November 2018. The following two are the links to the State Learning Reports: http://www.ncert.nic.in/ programmes/NAS/SRC.htmlandhttp://www.ncert.nic.in/programmes/NAS/ SRCX.html.

The Post NAS Interventions (2018-19) were initiated to reach out to all the districts in the different states. The learning gaps identified were used to provide feedback to the districts. A framework of intervention to improve the quality of learning in the schools is being suggested. The designing and implementation of the interventions include in its ambit the school leaders, teachers and the whole network of officials at clusters,

blocks, DIETs, SCERT and the Directorates of education, in the different states/UTs.

e-Pathshala

NCERT books are available for free in digital version on e-Pathshala app. About 15 lakh students have downloaded the e-Pathshala app. Visits in one year have crossed 30 million mark.

Pariksha Pe Charcha

Prime Minister's Interaction Programme with school and college students "Pariksha Pe Charcha" was held in 2018. It was a 'Town Hall' event which was unique in itself and was planned for the first time wherein the Prime Minister was interacting live with school and college students through web interaction across the country. Written questions were invited from the students for the programme on MyGov platform.

Vocationalisation of Secondary and Higher Secondary Education

The centrally sponsored scheme of Vocationalisation of Secondary and Higher Secondary Education was revised in 2014 with a view to align it with the National Skills Qualification Framework (NSQF) into which the National Vocational Education Qualification Framework (NVEQF) has been assimilated. The scheme has been subsumed Under Integrated Rashtriya Madhyamik Shiksha Abhiyan. The specific objectives of the scheme are to enhance the employability of youth through demand-driven competency-based, modular vocational courses; to maintain their competitiveness through provisions of multi-entry multi-exit learning opportunities and vertical mobility/interchange ability in qualifications; to fill the gap between the educated and employable; and to reduce the dropout rate at the secondary level and decrease the pressure on academic higher education. The revised scheme while introducing vocational education at the secondary level, seeks to integrate vocational education with general education and provide horizontal and vertical mobility to the students.

Construction and Running of Girls' Hostel

The centrally sponsored scheme of Construction and Running of Girls' Hostel for students of secondary and higher secondary schools was

launched in 2008-09 and is being implemented from 2009-10 replacing the earlier NGO driven scheme. The Scheme was subsumed under Rashtriya Madhyamik Shiksha Abhiyan (RMSA). The main objective of the hostel component of RMSA is to improve access and to retain the girl child in secondary and higher secondary classes (IX-XII) so that the girl students are not denied the opportunity to continue their study due to distance to school, parents' financial affordability and other connected social factors. The girl students in the age group of 14-18 years studying in Classes IX to XII belonging to SC, ST, OBC, minority community and BPL families form the target group of the scheme.

Inclusive Education for Disabled at Secondary Stage

The Scheme of Inclusive Education for Disabled at Secondary Stage (IEDSS) was launched in 2009-10 replacing the earlier scheme of Integrated Education for Disabled Children (IEDC). Inclusive Education for Disabled at Secondary Stage (IEDSS) component was subsumed under Rashtriya Madhyamik Shiksha Abhiyan. It provides assistance for the inclusive education of the disabled children in Classes IX-XII. The aim of the scheme is to enable all students with disabilities, after completing eight years of elementary schooling, to pursue further four years of secondary schooling (Classes IX to XII) in an inclusive and enabling environment. The scheme covers all children passing out of elementary school and studying at the secondary stage in government, local body and government-aided schools, with one or more disabilities as defined under the Persons with Disabilities Act (1995), and the National Trust Act (1999), namely, (i) blindness; (ii) low vision; (iii) leprosy cured; (iv) hearing impairment; (v) loco-motor disabilities; (vi) mental retardation; (vii) mental illness; (viii) autism; (ix) cerebral palsy and may eventually cover speech impairment, learning disabilities, etc.

The components of the scheme include assistance for two major components:

(a)*student-oriented components:* (i) assessment of medical/educational needs; (ii) provision of student specific facilities, like assistive devices, therapeutic service, books support services, etc.; (iii) development of learning material; and (iv) purchase of screen reading software. Girls with disability receive special focus and efforts are made under the scheme to help them gain access to secondary schools with a provision of

monthly stipend of ₹ 200/- for the disabled girls. ₹ 3,000/- per child per annum is provided as central assistance to be topped by the states by a scholarship of ₹ 600/- per disabled child per annum.

(b)*Other Components:* (i) appointment of special educators; (ii) special pay for general teachers trained in special education ₹ 400/- per month; (iii) construction and equipping of resource rooms; (iv) training of general school teachers to build their capacity to fulfill the needs of children with special needs; and (v) make schools barrier free.

Centrally Sponsored Scheme for Teacher Education

(A) Strengthening Teacher Education

The Centrally Sponsored Scheme for Teacher Education was initiated in 1987, pursuant to the formulation of the National Policy of Education, 1986. The scheme was revised for the Twelfth Five Year Plan. It aims to establish DIETs in all districts, created up to 2011, thereby increasing their numbers from existing 571 to 646; strengthen existing 106 to 122 Colleges of Teacher Education (CTEs) and up-grade existing government secondary teacher education institutions into CTEs; strengthen existing 32 to 39 Institutes of Advanced Studies in Education (lASEs); up-grade Department of Education in Universities as lASEs; and establish Block Institutes of Teacher Education (BITEs) in identified SC/ST/minority concentration districts.

(B) Quality in Teacher Education

Creation of Separate Cadre: About 17-states/ UTs have created separate cadre for teacher educators under the TE Scheme. States have also been asked to strengthen the cadre of teacher educators in their respective states/UTs.

National Council for Teacher Education (NCJE) Regulations, 2014 - Norms and Standards: The NCTE was established with a view to achieving planned and coordinated development of the teacher education system throughout the country, the regulation and proper maintenance of norms and standards in the teacher education system, and for matters connected therewith.

Re-organising/Restructuring of SCERT and Cadre Restructuring for Teacher Educators: Under the CSS-Teacher Education, nine states have

re-organised/ restructured their SCERT in 2016.

New Activities/Initiatives under CSSTE Scheme

India Teacher Education Portal (Prashikshak): The Department of School Education and Literacy, launched India Teacher Education Portal (Prashikshak) in 2016. This portal is helpful in monitoring of teacher education institutions and in providing comprehensive information to prospective students and teachers to select the right institute as per choice.

Scheme for Providing Quality Education in Madarsas

Ministry of Education, lays emphasis on providing equal opportunities to minorities as far as access to education is concerned. For this purpose, government is implementing the Scheme for Providing Quality Education in Madarsas (SPQEM) for the children of minorities. The objectives of the scheme are: encourage Madarsas and Maktabs to introduce formal subjects, i.e., science, mathematics, social studies, Hindi and English by means of providing financial assistance; children studying in Madarsas and Maktabs attain academic proficiency for Classes I-XII; Madarsas/Maktabs/Dar-ul-Uloom can opt to become accredited study centres with National Institute of Open Schooling (NIOS) for which proper assistance will be provided; children above 14 years in Madarsas/Maktabs/Dar-ul-Uloom are given opportunities to attain vocation training; and strengthening of Madarsas Board for Monitoring and Awareness of SPQEM.

The scheme provides assistance for appointment of teachers for teaching science, mathematics, social studies, languages, computer application and science. Full time graduate teacher is paid a salary of ₹ 6,000/-p.m. for 12 months and post graduate/B.Ed. ₹ 12,000/-p.m.. One time grant of ₹1,00,000/- for science/computer labs/workshops in Madarsas at the secondary/senior secondary level ₹ 5000/- as annual grant for maintenance. One time assistance of up to ₹ 50,000/- for libraries/book banks/teaching learning material followed by an annual grant of ₹ 5,000/-; and a grant up to a maximum amount of ₹15,000/- for purchase of science/math kits and other pedagogical equipment. Madarsas which have been in existence at least for three years and

registered under central or state government Acts, the Madarsas Board, with Waqf Boards or NIOS are eligible to apply for assistance under this programme.

Training is to be arranged in groups for Madarsa teachers appointed under the Scheme by SCERTs/DIETs/BRCs. Madarsas with respect to whom expenditure on account of honorarium of the teachers is met by the state government will not be eligible for salary component. Madarsas receiving financial assistance for teacher training, textbooks, computers, science/maths kits etc., from any other state/central scheme will not be eligible for that component under this scheme.

Infrastructure Development for Minority Institutes

The Scheme facilitates education of minorities by strengthening school infrastructure in minority institutions. It covers the entire country. It is to fund infrastructure development of private aided/unaided minority elementary/ secondary/senior secondary schools to the extent of 75 per cent and subject to a maximum of ₹ 50 lakhs per school. Organisations that are recognised by central or state governments are eligible to apply, they should have been functioning for at least last 3 years and have substantial enrolment of children from minorities. The scheme is implemented through the state governments and all requests for financial assistance are entertained by the state government in the prescribed application form.

National Means-cum-Merit Scholarship Scheme

The centrally sponsored National Means-cum-Merit Scholarship Scheme (NMMSS) was launched in 2008 with the objective to award scholarships to meritorious students of economically weaker sections to arrest their drop-out at Class VIII and encourage them to continue studies at secondary and higher secondary stage up to Class XII. One lakh scholarships of ₹ 6,000/- per annum (₹ 500/- per month) per student are awarded to selected students every year for Class IX and their continuation up to Class XII in a state government, government-aided and local body schools. There is quota of scholarships for different states/UTs. Students whose parental income from all sources is not more than ₹ 1,50,000/- are eligible to avail the scholarships. There is reservation as per the state government norms. The selection of students

for the scholarships is made through an examination conducted by the state governments. Scholarships are disbursed directly by electronic transfer into the bank accounts of students on quarterly basis following Direct Benefit Transfer (DBT) mode.

National Scheme of Incentive to Girls

The centrally sponsored National Scheme of Incentive to Girls for Secondary Education (NSIGSE) was also launched in 2008 with the objective to establish an enabling environment to reduce the drop-outs and to promote the enrolment of girl children belonging mainly to SC/ST communities in secondary schools. According to the scheme, a sum of ₹ 3,000/- is deposited in the name of the unmarried eligible girls as fixed deposit on enrolment in Class IX, who are entitled to withdraw it along with interest thereon on passing Class XI and attaining 18 years of age. The scheme covers (i) all girls belonging to SC/ST communities, who pass Class VIII and (ii) all girls who pass Class VIII examination from Kasturba Gandhi Balika Vidyalayas (irrespective of whether they belong to SC/ST) and enrol in class IX in a state government, government-aided and local body schools.

Implementation of Direct Benefit Transfer

Direct Benefit Transfer (DBT) scheme/system was launched in 2013 under which 25 schemes across eight ministries/departments were selected for implementation of DBT system in 43 pilot districts of 16 states/UTs. It envisages direct transfer of funds to beneficiary account through the Aadhaar Payment Bridge (APB). From 2015, DBT Scheme was extended in the entire country. Two scholarship schemes of the Department of School Education and Literacy, viz., National Means-cum-Merit Scholarship Scheme (NMMSS) and National Scheme of Incentive to Girls for Secondary Education (NSIGSE) are covered under it. A National Scholarship Portal (NSP) has been made operational for on-line submission of proposals/list of beneficiaries by the state governments for NMMSS and NSIGSE.

Adult Education

At the time of independence, 86 per cent of India's population was illiterate and as such the main focus of adult education had been on its very bottom tier, i.e., imparting of 'basic literacy'. For accomplishment of this objective, a series of programmes were introduced since the First Plan period, the most prominent, being the National Literacy Mission (NLM), launched in 1988 for the adults in the age group of 15+. The programme of National Literacy Mission was re-vamped in 2009 in alignment with new paradigms of lifelong learning as Saakshar Bharat. Considerable progress has been made in raising the literacy rate of the country but still the levels remain uneven across different states, districts, social groups and minorities. The overall goal of adult education is to establish a fully literate society through improved quality and standard of adult education and literacy.

The National Literacy Mission Authority (NLMA) is the operating and implementing organisation at the national level for all the activities envisaged in Adult Education and Skill Development. During the 12th Five Year Plan, NLMA strived to raise the literacy rate to 80 per cent and to reduce the gender gap to less than 10 per cent.

Of the 410 districts which qualify for coverage under Saakshar Bharat Programme, the Programme has been sectioned in 404 districts in 26 states and one union territory covering about 1.64 lakh Gram Panchayats. During 2016-17, the programme continued in these 404 districts. Teaching-learning process has commenced in 57.8 lakh Literacy Centres. About 45.73 lakh Volunteer Teachers have been trained by Master Trainers and 2.54 lakh Master Trainers were trained by Resource Persons. In addition, about 13.5 thousand Resource Persons have also been trained. Basic Literacy Primers in 13 languages and 26 local dialects have been printed and distributed so far for the learners. Around 8.27 crore learners have been enrolled under basic literacy.

National Award to Teachers

Instituted in 1958, the National Award to Teachers (NAT) is given away by the President of India on 5th September (Teachers' Day) every year to give public recognition to meritorious teachers working in primary, middle and secondary schools. Altogether there are 378 awards out of which 23 are reserved for Sanskrit, Persian and Arabic teachers.

Each state/union territory/organisation has an earmarked quota based on the number of teachers. The Scheme also covers teachers of the schools affiliated to Central Board of Secondary Education (CBSE) including teachers of independent affiliated schools situated abroad; Council for Indian School Certificate Examination (CISCE); Sainik School; Kendriya Vidyalaya Sangathan (KVS); Navodaya Vidyalaya Samiti (NVS); Central Tibetan School Administration (CTSA); and schools run by the Atomic Energy Education Society. From the award year 2001, 'Special Awards' have been instituted for teachers promoting inclusive education in schools and the education of children with disabilities in regular schools. The total number of 'Special Awards' are 43. 'Special Awards' are conferred on the teachers of following categories: teachers with disabilities working in mainstream schools; special teacher; or trained general teachers who have done outstanding work for inclusive education. Each award carries with it a certificate of merit, a cash award of ₹ 50,000/- and a silver medal.

Kendriya Vidyalaya Sangathan

The Scheme of Kendriya Vidyalayas (KVS) (Central Schools) was approved in 1962 to provide uninterrupted education to the wards of transferrable central government employees. Consequently, Central School Organisation was started as a unit of the Ministry of Education. Initially, 20 regimental schools, then functioning at places having large concentration of defence personnel, were taken over as Central Schools during the academic year 1963-64.

The Kendriya Vidyalaya Sangathan was registered as a Society under the Societies Registration Act in 1965. The primary aim of the Sangathan is to provide, establish, endow, maintain, control and manage the Central Schools (Kendriya Vidyalayas) located all over India and abroad. The Government of India wholly finances the Sangathan.

Website : www.kvsangathan.nic.in

Jawahar Navodaya Vidyalayas

The National Policy on Education, 1986, envisaged setting up of residential Navodaya schools with an aim of providing excellence coupled with equity and social justice. Consequent to this, Navodaya

Vidyalaya Samiti was registered as a Society, under the Society Registration Act, of 1860, with the objective to establish Navodaya Vidyalayas to provide good quality modern education, including a strong component of inculcation of values, awareness of the environment, adventure activities and physical education to talented children predominantly from the rural areas without regard to their family's socio-economic condition. The opening of a Jawahar Navodaya Vidyalaya is based on the proposal from the concerned state/UT governments offering about 30 acres of suitable land, free of cost. The state government is also to provide sufficient temporary building and other infrastructures, free of rent, to accommodate 240 students and staff for three to four years or till such time the Samiti constructs its own buildings at the permanent site.

Website : www.navodaya.gov.in

National Council of Educational Research and Training

The National Council of Educational Research and Training (NCERT) provides academic and technical support for qualitative improvement of school education. The NCERT was established in 1961 as an apex national body to lead qualitative changes in school education. NCERT has been playing an advisory role guiding central and state governments in formulating policies, acts and government programmes. It has played a crucial role in the development of national policies on education (1968-1986) and national curriculum frameworks. The researches undertaken by the Council have led to building new perspective of schooling and also provided inputs for formulation of policies and programmes. NCERT has been designing and offering innovative and need-based courses for teachers, teacher educators and counsellors. The curricular and other learning materials developed by the Council have helped in bringing about quality schooling. NCERT has received recognition both at national and international levels in the area of school education owing to its work done in the last 50 years. It is a unique institution in the country, conducting researches, preparing skilled educational professionals and developing curriculum and curricular materials. The major constituent units of the NCERT are: National Institute of Education (NIE), New Delhi; Central Institute of Education Technology (CIET), New Delhi; Pandit Sunder Lal Sharma Central Institute of Vocational Education

(PSSCIVE), Bhopal; and five regional institutes of education (RIEs) at Ajmer, Bhopal, Bhubaneswar, Mysuru and Umiam (Meghalaya).

Website: www.ncert.nic.in

National Bal Bhavan

National Bal Bhavan (NBB), established in 1956, is an autonomous institution funded by the Ministry. Bal Bhavan as a movement is spread across the length and breadth of the country with 134 affiliated Bal Bhavans and Bal Kendras. In addition there are 48 Bal Bhavan Kendras and a Bal Bhavan at Mandi village in Delhi. National Bal Bhavan aims at enhancing the creative potential of children by providing them various activities, opportunities and common platform to interact, experiment, create and perform according to their age, aptitude and ability. It offers a barrier-free environment with immense possibilities of innovation without any stress or strain. Various creative activities are conducted for children specially from the deprived sections of society on a regular basis at NBB and its affiliated institutes.

Website : www.nationalbalbhavan.nic.in

Central Board of Secondary Education

The Central Board of Secondary Education is a Board of Education for public and private schools, under the Union Government. Central Board of Secondary Education has asked all schools affiliated to follow only NCERT curriculum.

Website : www.cbse.nic.in

National Institute of Open Schooling

National Institute of Open Schooling (NIOS) is an 'Open School' to cater to the needs of a heterogeneous group of learners up to pre-degree level. It was started as a project with in-built flexibilities by the Central Board of Secondary Education (CBSE) in 1979. In 1986, the National Policy on Education suggested strengthening of Open School System for extending open learning facilities in a phased manner at secondary level all over the country as an independent system with its own curriculum and examination leading to certification. Consequently, the Ministry of

Human Resource Development set up the National Open School (NOS) in 1989. In July 2002, the Ministry amended the nomenclature of the organisation from the National Open School to the National Institute of Open Schooling (NIOS) with a mission to provide relevant continuing education at school stage, up to pre-degree level through open learning system to prioritised client groups as an alternative to formal system, in pursuance of the normative national policy documents and in response to the need assessments of the people, and through it to make its share of contribution; to universalisation of education; to greater equity and justice in society; and to the evolution of a learning society.

The NIOS provides opportunities to interested learners by making available the following courses/programmes of study through open and distance learning (ODL) mode: Open Basic Education (OBE) programme for 14+ years age group, adolescents and adults at A, B and C levels that are equivalent to classes III, V and VIII of the formal school system consists of: secondary education course, senior secondary education course, vocational education courses/programmes, life enrichment programmes.

At the secondary and senior secondary levels, NIOS provides flexibility in the choice of subjects/courses, pace of learning, and transfer of credits from CBSE, some board of school education and state open schools to enable learner's continuation. A learner is extended as many as nine chances to appear in public examinations spread over a period of five years. The credits gained are accumulated till the learner clears required credits for certification. The learning strategies include: learning through printed self-instructional material, audio and video programmes, participating in personal contact programme, and Tutor Marked Assignments. Enrichment is also provided to the learners through the half-yearly magazine "Open Learning". The study material is made available in English, Hindi and Urdu mediums. The On-Demand Examination System (ODES) is in operation at secondary and senior secondary stage. NIOS offers 28 subjects in eight mediums (Hindi, English, Urdu, Marathi, Telugu, Gujarati, Malayalam and Odia) for secondary examinations and 28 subjects in Hindi, English, Urdu, Bengali and Odia mediums for senior secondary examinations. Besides these, NIOS has provision of offering vocational subjects in combination with

academic subjects at secondary stage and 20 vocational subjects in combination with academic subjects at the senior secondary level.

Website : www.nios.ac.in

Mid-Day Meal Scheme

The Mid-Day Meal Scheme covers children of Classes I-VIII studying in government, government-aided schools, special training centres (STC) and madarsas/ maqtabs supported under Sarva Shiksha Abhiyan (SSA). It is the largest school feeding programme in the world. Apart from promoting access and retention, the Mid-Day Meal Scheme has also contributed to social and gender equity. It has helped in preventing classroom hunger, promoting school participation and fostering social equality and enhancing gender equality.

Norms for Mid-Day Meal Scheme

(i) Calorific Value of Mid-Day Meals: The cooked mid-day meal consists of 100 grams of wheat/rice, 20 grams of pulses, 50 grams of vegetables and 5 grams of oil/fat and provides 450 calories of energy and 12 grams of protein at primary stage. For upper primary stage children, it consists of 150 grams of wheat/rice, 30 grams of pulses, 75 grams of vegetables and 7.5 gram of oil/fat and provides 700 calories of energy and 20 grams of proteins.

(ii) Cooking cost under MDM Scheme: The cooking cost covers the expenditure for pulses, vegetables, cooking oils, condiments, fuel, etc. The rate of cooking cost from 2016 is ₹ 4.13 per child per day for primary and ₹ 6.18 per child perday for upper primary. The cooking cost is shared between the centre and the states in the ratio of 60:40 for non-NER states and UTs with legislature, 100 per cent for remaining UTs and 90:10 for NER states and Himalayan states, viz., Himachal Pradesh and Uttarakhand.

Tithi Bhojan

"Tithi Bhojan" is a concept designed to ensure greater public participation under the Mid-Day Meal Programme being followed in Gujarat. In order to bring in greater community participation, local communities are encouraged to celebrate important family events, viz., birth of a child, success in exam, inauguration of new house, etc., by

contributing to the mid-day meal served in the local schools. It is voluntarily served by the community/family among school children in several forms like sweets and namkeen along with regular MDM, full meals, supplementary nutritive items like sprouted beans, contribution in kind such as cooking ware, utensils, dinner sets or glasses for drinking water. All the states/UTs have been requested to consider adopting the practice of Tithi Bhojan with this nomenclature or any nomenclature suitable to the state/UT governments. The concept has been adopted by different states with local nomenclatures like *Sampriti Bhojan* in Assam, *Dham* in Himachal Pradesh, *Sneh Bhojanin* Maharashtra, *Shalegagi Naavu Neevu* in Karnataka, *Anna Dhanam* in Puducherry, *Priti Bhoj* in Punjab and *Utsav Bhoj* in Rajasthan.

Implementation of Automated Monitoring System

The Department of School Education and Literacy has put in place an automated system of data collection for real-time monitoring of MDMS. Such data is being collected from schools with no cost to school headmaster and teachers. Under the automated monitoring system, states/UTs are setting up a suitable system of data collection (i.e. Interactive Voice Response System (IVRS)/ SMS/mobile application/web application) from schools on a daily basis and using it for purpose of monitoring and timely follow-up action.

Cent per cent Aadhaar Enrolment of Children

The Department issued notification for enrolment of cent per cent students in all schools. The use of Aadhaar identity document for delivery of services or benefits or subsidies simplify the government delivery processes, brings in transparency and efficiency. Enrolment of children under Aadhaar would enable to eliminate the proxy enrolment and provide the benefits of Mid-Day Meal Scheme to the deserving children in a seamless manner.

Mid-Day Meal Rules

The Mid-Day Meal (MDM) Rules, were notified under the National Food Security Act (NFSA), 2013. All the states/UTs have been advised to disseminate and enforce the MDM Rules 2015 in all eligible schools. The salient features of Mid-Day Meal Rules include: (i) strengthening quality by making testing of food samples mandatory; (ii) enhanced role of school management committees in supervision of MDM in school; (iii)

supply of foodgrains at NFSA rates of ₹ 3 per kg for rice and ₹ 2 per kg for wheat instead of BPL rates of ₹ 5.65 and ₹ 4.15 per kg respectively; and (iv) food security allowance to be paid by the state government, if MDM is not provided in school on any school day due to nonavailability of foodgrains, cooking cost, fuel or absence of cook-cum-helper or any other reason.

Testing of Food Samples

The Mid-Day Meal Guidelines for engagement of accredited labs by the state/UT governments are put in place for testing of the meals served in the schools.

Social Audit

Social audit means the process in which people collectively monitor and evaluate the planning and implementation of a programme or scheme. The social audit was conducted by Society for Social Audit Accountability and Transparency (SSAAT) in two districts viz., Khammam and Chittoor of undivided Andhra Pradesh during 2012-13. Encouraged by the outcome, the Department had issued guidelines in 2014 for conducting of social audit. So far 13 states viz., Bihar, Maharashtra, Odisha, Karnataka, Punjab, Uttar Pradesh, Telangana, Nagaland, Andhra Pradesh, West Bengal, Rajasthan, Mizoram and Tamil Nadu have completed the conduct of social audit.

Higher and Technical Education

There has been phenomenal growth of higher education in India since independence. There were only 20 universities and 500 colleges at the time of independence which have increased by 38 times (i.e., 760) in the case of the universities and 77 times (i.e., 38,498) in the case of colleges. Similarly, there has been tremendous growth in the enrolment also. Moreover, the statistical overview of the higher education system clearly shows that there has been phenomenal growth in institutions (universities, colleges, technical institutions) as well as in intake, enrolment, etc.

National Institutional Ranking Framework

The National Institutional Ranking Framework (NIRF) for educational institutions was launched to meet a felt need for a framework that would enable parents, students, teachers, educational institutions and other stakeholders to rank institutions on the basis of a set of objective parameters and a transparent process. Developed by a team of experts in education and heads of institutions, the portal and the framework is presently available for engineering and management institutions.

Impacting Research Innovation and Technology

To identify the needs of the country in terms of its research and technology requirements, ten goal posts have been identified and research groups are being set up to formulate time-bound plans of action for each. Leading academic institutions like IITs and ISC have been identified to set the process in motion.

Regulator Review

Lots of private institutions have come up in higher education sector with the growing trend of commercialisation. They sometimes are not maintaining the laid-down standards. UGC's entire functioning continues to be oriented more towards grant giving rather than regulation and enforcement of minimum standards. A UGC Review Committee was constituted in 2014. A similar committee was constituted for the All India Council for Technical Education (AICTE). The Committee is to conduct a review of the present status of AICTE and suggest restructuring and re-organisation of AICTE for attaining even better performance to meet the desired objectives.

Bachelor of Vocational Studies

The UGC has introduced the scheme for B.Voc degree with multiple exits at diploma/ advanced diploma under national skill qualification framework (NSQF). The objectives are: (i) to enhance the employability of youth; (ii) to maintain their competitiveness through provisions of multi-entry, multi-exit learning opportunities and vertical mobility; (iii) to fill the gap between educated and employable; and (iv) to reduce the dropout rate at the secondary level.

Skills Assessment Matrix for Vocational Advancement of Youth

A credit framework Skills Assessment Matrix for Vocational Advancement of Youth (SAMVAY) is now in place, which allows vertical and lateral mobility within vocational education system and between the current education system. The strength of this framework is the seamless integration of pursuit of academic knowledge and practical vocational skills.

Education Sector Skill Council

Education Sector Skill Council was constituted in 2014, to consider job roles other than academic faculties and teacher qualifications. The functions of the SSC, include setting up of Labour Market Information System (LMIS) to assist planning and delivery of training, identification of skill development needs and preparing a catalogue of skill types, develop skill development plan and maintain skill inventory developing skill competency standards and qualifications.

Yukti - Yogya Kalakriti ki Takneek

Yukti aims at skill development and upgradation of design and technologies enhancing the economic prospects of those engaged in traditional crafts and arts as a means of livelihood. It aims at introducing appropriate designs and technology for innovation and pedagogical methods for introducing skills for upgradation.

SAKSHAM - a Scholarship for Differently Abled Children

SAKSHAM - Scholarship Scheme for Differently abled Children - aims at providing encouragement and support to differently abled children to pursue technical education. Scholarships amounting to ₹ 5 crore per annum as tuition fees and incidentals are to be provided to needy and meritorious students for pursuing technical education at AICTE approved institutions. This is to help them to achieve their college goals, despite learning issues, environmental challenges or medical bills.

Ishan Uday - for Students of North-East Region

The UGC launched a special scholarship scheme for students of north-east region, Ishan Uday, from the academic session 2014-15. The Scheme envisages grant of 10,000 scholarships to students from the north-east

region whose parental income is below ₹ 4.5 lakh per annum and provide scholarship ranging from ₹ 3,500 to ₹ 5,000 per month for studying at undergraduate level in colleges/ universities.

Ishan Vikas - Academic Exposure for North-Eastern Students

The programme has been launched with a plan to bring selected college and school students from the north-eastern states into close contact with IITs, NITs and IISERs during their vacation periods for academic exposure.

Women Leaders

Women appointed as chairpersons, board of governors of apex technical education institutes and in National Institutes of Technology (NITs). For the first time in the history of IITs, two women scientists were nominated to the IIT council.

Pragati

Pragati (scholarship for girl students) - is a scheme of AICTE aimed at providing assistance for advancement of girls, participation in technical education. Education is one of the most important means of empowering women with the knowledge, skill and self-confidence necessary to participate fully in the development process. This is an attempt to give every young woman the opportunity to further her education and prepare for a successful future. Salient features of the scheme include: a number of scholarships per annum: ₹ 4,000 'One Girl' per family, where the family income is less than ₹ 6 lakh per annum. The candidates will be selected on merit at the qualifying examination to pursue technical education from amongst such candidates. Amount of scholarship: tuition fee of ₹ 30,000/- or at actual, whichever is less and ₹ 2,000/- per month for 10 months as incidentals each year. 15 per cent for SC, 7.5 per cent ST and 27 per cent for OBC candidate/applicant are reserved. Out of the total number of scholarships in each scheme, 50 per cent of them are available at each degree/ diploma level and also transferrable in the event of non-availability of eligible applicant.

Swami Vivekananda Scholarship for Single Girl Child

The drop-out ratio at various levels of education for girls is much higher than that of boys. Keeping Swami Vivekananda's ideas of women education and to promote girls' education, UGC has introduced the Swami Vivekananda Scholarship for Single Girl Child for research in social sciences with an aim to compensate direct costs of higher education especially for such girls who happen to be the only girl child in their family.

Know Your College

Know Your College is a portal developed for helping a prospective student make a valued judgement for selection of college providing the necessary information about the college. Details like collaborations, mobile education, vocational education, community colleges, use of ICT, model curriculum, and a research portal are available. Details about facilities for the specially-abled, facilities for girls, placement facilities and entrepreneurship details are also available. Students can lodge online grievances on the portal for redressal. This application allows a student either in the country or outside to submit an online grievance.

Campus Connect

The National Mission on Education through Information and Communication Technology (NMEICT) Scheme aims to leverage the potential of ICT for teaching and learning processes. The Mission has two major components: (a) content generation; and (b) providing connectivity along with provision for access devices to the institutions and learners. Under it connectivity to 419 universities/ university level institutions and more than 25,000 colleges and polytechnics in the country has been envisaged to be provided.

National e-Library

The National Digital Library of India is envisaged as a national knowledge asset which will provide ubiquitous digital knowledge source. It will support and enhance education, research and innovation catering to the needs of all types of learner groups over the country.

Study Webs of Active-Learning for Young Aspiring Minds

Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) is a programme initiated arid designed to achieve the three cardinal principles of the education policy, namely, access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This is done through a platform that facilitates hosting of all the courses to be accessed by anyone, anywhere at any time. All the courses are interactive, prepared by the best teachers in the country and are available, free-of-cost to any learner. More than 1,000 specially chosen faculty and teachers from across the country have participated in preparing these courses. The courses hosted on SWAYAM are in four quadrants - (i) video lectures; (ii) specially prepared reading material that can be downloaded/printed; (iii) self-assessment tests through tests and quizzes; and (iv) online discussion forum for clearing the doubts. Steps have been taken to enrich the learning experience by using audio-video and multi-media and state-of-the-art technology. The courses delivered through SWAYAM are available free-of-cost to the learners. However, learners wanting a SWAYAM certificate should register for the final proctored exams that come at a fee and attend in-person at designated centres on specified dates. Eligibility for the certificate will be announced on the course page and learners will get certificates only if the desired criteria matches. Universities/colleges approving credit transfer for these courses can use the marks/ certificate obtained in these courses for the same.

Open and Distance Learning in Higher Education

In order to enhance the accessibility to higher education in the country, a lot of emphasis is being laid on expanding open and distance learning through higher education institutions. Open and distance learning is offered in the country either by dual mode universities or stand-alone open universities including IGNOU, which is a central university, and 14 state open universities. The University Grants Commission (UGC) is the regulatory authority for open and distance learning in the country.

Rashtriya Uchchatar Shiksha Abhiyan

Rashtriya Uchchatar Shiksha Abhiyan is a centrally sponsored scheme for funding the states, state universities and colleges to achieve equity, access and excellence in higher education. It aims to strengthen and incentivise both private and public state universities where nearly 94 per cent of higher education students are enrolled.

Study in India

This is a programme for attracting foreign students to study in the best higher education institutions in India. Currently, 116 institutions have been selected for the programme. While the programme is open to all the countries in the world, the focus is on 42 African and Asian countries. Students apply in institutions of their choice through SII portal and are selected on the basis of their marks in their school final qualifying exams. Institutions offer merit-based fee waiver ranging from 25 to 100 per cent.

IND-SAT

The Ministry of Education conducted the first ever Indian Scholastic Assessment (Ind-SAT) Test 2020 under its Study in India programme in 2020. Ind-SAT is an exam for grant of scholarships and admissions to foreign students for studying in select Indian universities under the Study in India programme. Nearly five thousand candidates from Nepal, Ethiopia, Bangladesh, Bhutan, Uganda, Tanzania, Rwanda, Sri-Lanka, Kenya, Zambia, Indonesia and Mauritius appeared for the exam conducted in the proctored internet mode by the National Testing Agency.

Central Sanskrit Universities Act, 2020

The Central Sanskrit Universities Act, 2020 was notified in April 2020. This Act converts (i) Rashtriya Sanskrit Sansthan, New Delhi, (ii) Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, and (iii) Rashtriya Sanskrit Vidyapeeth, Tirupati into Central Sanskrit Universities.

Global Initiative for Academic Network

Global Initiative for Academic Network (GIAN) aims at tapping the talent pool of scientists and entrepreneurs, internationally to encourage

their engagement with the institutes of higher education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.

Research Parks

The objective of the Research Parks is to create a knowledge and innovation ecosystem through collaboration between industry and academia. It will enable, encourage and develop cutting edge technology and innovation that exceeds the global standard.

Growing Aptitude in Numerical Innovations and Training

Growing Aptitude in Numerical Innovations and Training (GANIT) week in schools affiliated to CBSE was organised to commemorate the birth anniversary of Srinivasa Ramanujan and to actively promote interest of students in mathematics.

Copyright

Acquisition of copyright is automatic and it does not require any formality. Copyright comes into existence as soon as a work is created and no formality is required to be completed for acquiring it. However, as per Section 48 of the Act, certificate of registration of copyright and the entries made therein serve as prima facie evidence in a court of law with reference to dispute relating to ownership of copyright. The Copyright Office was established in 1958. It functions under the administrative control of the Department of Higher Education. It is headed by the Registrar of Copyright, who has quasi-judicial powers in handling cases relating to copyright. The main function of the Copyright Office is to undertake registration of copyright. The Register of Copyrights provides information regarding works of copyright to the general public. In addition to registration, facilities like inspection of the Register and taking extracts thereof are also available in the Copyright Office.

As provided under Section 13 of the Copyright Act, 1957, copyright subsists in the following classes or works: (a) original literary, software,

musical, and artistic works; (b) cinematographic films; and (c) sound recording. The Copyright Office also registers changes in the particulars of copyright entered in the Register of Copyrights in accordance with Rule 70 of the Copyright Rules, 2013. Section 47 of the Act also provides for inspection of the Register of Copyrights or taking certified copies of the extracts against payment of the prescribed fee. To facilitate this, an index of the works whose particulars have been entered in the Register is also maintained in the Copyright Office. While minor corrections and changes in particulars entered in the Register can be made by the Registrar, only the Copyright Board is empowered to expunge any entries made in the register on an application by the Registrar or any person aggrieved.

Procedure for Registration of Copyright: As per Section 45 of the Copyright Act, 1957, either the author or publisher or owner of copyright or any other person interested in the copyright of a work can make an application in the prescribed format along with prescribed fee to the Registrar of Copyrights for entering particulars of the work in the Register. The Copyright Office provides registration facilities to all types of works and the applications for registration of works can be sent to Copyright Office postally and online.

Modernisation of Copyright Office: The e-filing facility was started in 2014 and a new logo of Copyright with newly designed certificate is being used. Digitisation of copyright records is under process and about 6.00 lakhs Register of Copyrights have been scanned and will be operative soon.

There is a quasi-judicial body Copyright Board which was constituted in 1958 and had been functioning on a part-time basis. The jurisdiction of the Copyright Board extends to the whole of the country. The Board is entrusted with the task of adjudication of disputes pertaining to copyright registration and assignment of copyright, rectification of registration, grant of compulsory licences in respect of works withheld from public, unpublished Indian works, for benefit of physically disabled persons, production and publication of translations and works for certain specified purposes. The Copyright Board also determines and fixes rate of royalties for statutory licences for cover versions and broadcasting of literary and musical works and sound recordings. It also hears cases in other

miscellaneous matters instituted before it under the Act. The Copyright (Amendment) Act, 2012 provides for a three member permanent Copyright Board consisting of a Chairman and two other members.

11 Energy

ENERGY is an essential input for economic development and improving the quality of life. Development of conventional forms of energy for meeting the growing energy needs of society at a reasonable cost is the responsibility of the government. Development and promotion of non-conventional/alternate/new and renewable sources of energy such as solar, wind and bio-energy, etc., are also getting sustained attention. Nuclear energy development is being geared up to contribute significantly to the overall energy availability in the country.

Power

Power development in India commenced at the end of the nineteenth century with the commissioning of electricity supply in Darjeeling during 1897, followed by the commissioning of a hydropower station at Sivasamudram in Karnataka during 1902. In the pre-lndependence era, the power supply was mainly in the private sector, that too restricted to the urban areas. With the formation of State Electricity Boards during Five-Year Plans, a significant step was taken in bringing about a systematic growth of power supply industry all over the country. A number of multi-purpose projects came into being, and with the setting up of thermal, hydro and nuclear power stations, power generation started increasing significantly.

The Ministry of Power is primarily responsible for the development of electrical energy in the country. The Ministry is concerned with perspective planning, policy formulation, processing of projects for investment decisions, monitoring of the implementation of power projects, training and manpower development and the administration and enactment of legislation with regard to thermal and hydro power generation, transmission and distribution. In all technical matters, the Ministry of Power is assisted by the Central Electricity Authority (CEA).

The construction and operation of generation and transmission projects in the central sector are entrusted to Central Sector Corporations,

viz., the National Thermal Power Corporation (NTPC), the National Hydroelectric Power Corporation (NHPC), the North-Eastern Electric Power Corporation (NEEPCO), and the Power Grid Corporation of India Limited (PGCIL). The Power Grid is responsible for all the existing and future transmission projects in the central sector and also for the formation of the National Power Grid. Two joint-venture power corporations, namely, Satluj Jal Vidyut Nigam (SJVN) (formerly known as NJPC) and Tehri Hydro Development Corporation (THDC) are responsible for the execution of the Nathpa Jhakri Power Project in Himachal Pradesh and projects of Tehri Hydro Power Complex in Uttarakhand respectively. Three statutory bodies, i.e., the Damodar Valley Corporation (DVC), the Bhakra-Beas Management Board (BBMB) and Bureau of Energy Efficiency (BEE), are also under the administrative control of the Ministry of Power. Programmes of rural electrification are provided financial assistance by the Rural Electrification Corporation (REC). The Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) provide term-finance to projects in the power sector. The autonomous bodies (societies), namely Central Power Research Institute (CPRI) and the National Power Training Institute (NPTI) are also under the administrative control of the Ministry of Power. A Power Trading Corporation has also been incorporated primarily to support the Mega Power Projects in private sector by acting as a single entity to enter into Power Purchase Agreements (PPAs).

Website: www.powermin.nic.in

Deendayal Upadhyaya Gram Jyoti Yojana

Government of India launched a new scheme namely Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) with the following objectives: (a) to separate agriculture and non-agriculture feeders for judicious rostering of supply to agricultural and non-agricultural consumers in rural areas; (b) strengthening and augmentation of sub-transmission and distribution infrastructure in rural areas; (c) metering in rural areas (feders, distribution transformers and consumers). The erstwhile rural electrification scheme was subsumed in DDUGJY as a separate rural electrification component and the approved outlay of the erstwhile scheme has been carried forward to the DDUGJY.

Saubhagya—Pradhan Mantri Sahaj Bijli Har Char Yojana

To achieve universal household electrification in the country by March 2019, the government launched Saubhagya scheme with a total cost of ₹ 16,320 crore including gross budgetary support of ₹ 12,320 crore during the entire implementation period. The scope of the Scheme includes: providing electricity connections to all un-electrified households in rural areas. APL households will get electricity connections on payment of ₹ 500 (which is payable in 10 installments in the electricity bill); providing Solar Photo Voltaic (SPV) based stand-alone system for un-electrified households located in remote and inaccessible villages/habitations, where grid extension is not feasible or cost effective; and providing electricity connections to all remaining economically poor un-electricied households in urban areas.

Integrated Power Development Scheme

In order to provide impetus to strengthening of power distribution sector in urban areas, Ministry of Power launched Integrated Power Development Scheme (IPDS) in 2014 with the following components: (i) strengthening of sub-transmission and distribution network in urban areas; (ii) metering of distribution transformers/ feeders/consumers in urban areas; (iii) IT enablement of distribution sector and strengthening of distribution network.

UDAY—Ujwal DISCOM Assurance Yojana

UDAY scheme was launched in 2015 for a sustainable solution to the operational and financial inefficiencies of DISCOMs across the country, through targeted interventions in the form of lower interest costs, reduction of cost of power, increased revenues and improved operational efficiencies.

UDAY is voluntary scheme for participation and 26 states and one union territory have joined the scheme. The scheme is being monitored by an inter-ministerial committee and a state level committee. A portal (www.uday.gov.in) has been developed for ease of data entry by states/DISCOMs. This portal provides basic analytics and progress of performance of various states/DISCOMs in the public domain as a measure of transparency.

Development of National Grid

National power grid in the country is being developed in a phased manner. All five regional grids, namely, northern region, western region, eastern region, north-eastern region and southern region have been inter-connected in synchronous mode and total transfer capacity of inter-regional links in June 201 7 was about 75,050 MW.

The updated version of Energy Conservation Building Code (ECBC) was launched in 2017. The scope of ECBC 2017 includes norms and standards for building design, including the envelope, lighting, heating, air-conditioning and electrical systems. It sets minimum energy standard for new commercial building having connected load of 100 KW and above or contract demand of 120 KW and above.

Pradhan Mantri Ujjwala Yojana

In order to provide clean cooking fuel to poor households especially in rural areas, the government had launched Pradhan Mantri Ujjwala Yojana (PMUY) to provide deposit free LPG connections to 8 crore women belonging to the Below Poverty Line (BPL) households. The primary objective is to provide access to clean cooking fuel LPG to BPL households thereby protecting their health by reducing the serious health hazards associated with use of conventional cooking fuels such as firewood, coal, cowdung, etc., which causes servere indoor household air pollution. Use of LPG as a cooking fuel frees women from the drugery of collecting firewood, reduces time spent on cooking and prevents deforestation. So far, more than 5.55 crore BPL families have been benefited by this scheme.

The eligible families are identified through Socio-Economic Caste Census list and other seven categories, i.e., beneficiaries of Pradhan Mantri Awas Yojana (PMAY-Gramin); beneficiaries of Antyodaya Anna Yojana; SC/ST households; most backward classes; forest dwellers; tea/ex-tea garden tribes; and residents of islands/river islands subject to fulfilling other terms and conditions of the scheme.

PMUY aims to safeguard the health of women and children by providing them a clean cooking fuel (LPG), so that they do not have to compromise their health in smoky kitchens or wander in unsafe areas for collecting firewood. It was launched in 2016 with an initial target of providing 5 crore and subsequently revised to 8 crore deposit free LPG

connections to adult women of poor households by March 2020 to ensure women empowerment, especially in rural India.

PAHAL

The government, as a measure of Good Governance, introduced well targeted systems of subsidy delivery to LPG consumers through PAHAL. This initiative was aimed at rationalizing subsidies based on an approach to cut subsidy leakages, but not subsidies per se. Applicable subsidy is directly transferred into the bank account of the beneficiaries. So far, more than 22.40 crore LPG consumers have joined the scheme. PAHAL has entered into Guinness Book of World Records as being the largest Direct Benefit Transfer scheme and so far more than ₹ 83,653 crore have been transferred into the bank account of consumers.

Petroleum and Natural Gas

The Ministry of Petroleum and Natural Gas is concerned with exploration and production of oil and natural gas (including import of liquefied natural gas), refining, distribution and marketing, import, export and conservation of petroleum products.

Energy is a key driver of economic growth. Efficient, reliable and affordable energy is essential for the sustainable development and inclusive growth of the overall economy. Due to rapid economic expansion, India has become world's fastest growing energy market. India surpassed Russia to become the 3rd largest energy consumer in the world after China and USA during 2015. Oil and gas accounted for around 35 per cent share in India's energy consumption. In fact, India surpassed Japan to become 3rd largest oil consumer in the world after US and China during 2015.

Website: www.petroleum.nic.in

Production of Crude Oil and Natural Gas

The crude oil production for 2019-20 was 32.17 million metric tonnes (MMT), Natural gas production during the same period was 31.18 billion cubic meters (BCM).Gas production during April-August 2020 was at 11.65 BCM (provisional).

Refining Capacity

Indian refinery industry has done well in establishing itself as a major player globally. India, which is second largest refiner in Asia after China, is emerging as a refinery hub with refining capacity exceeding demand. The country's refinery capacity has also increased over the years which is 248.90 MMTPA.

Imports and Exports of Petroleum Products

Import of crude oil during 2019-20 was 226.95 MMT valued at ₹ 7,16,627 crore as against import of 226.50 MMT valued at ₹ 7,83,183 crore in 2018-19 which marked an increase of 0.2 per cent in quantity terms but 8.5 per cent decrease in value terms as compared to the import of crude oil during 2018-19. During current year (April-July, 2020), imports of crude oil is 57.17 MMT valued at ₹ 93,467 crore. The import of petroleum products having decreased to 43.33 MMT valued at ₹ 1,26,954 crore which shows 29.93 per cent increase in quantity terms and 11.69 per cent increase in value terms against 33.35 MMT imports of petroleum products valued at ₹ 1,13,665 crore during 2018-19 while export of petroleum products was 65.66 MMT valued ₹ 2,53,946 crore which shows an increase of 7.47 per cent in quantity terms but 5.14 per cent decrease in value terms against the exports of 61.10 MMT valued at ₹ 1,13,665 crore during 201819. During April-July, 2020, imports of petroleum products is 14.46 MMT valued at ₹ 29,640 crore and exports of petroleum products is 20.12 MMT valued at ₹ 40,471 crore.

Make in India

To roll out the Make in India campaign in oil and gas sector, a policy to provide purchase preference in all public sector undertakings under the Ministry was approved. The policy aims to encourage participation of domestic and overseas players in the domestic oil and gas sector, create employment opportunities, help higher value addition in the products manufactured in the country and services rendered for the oil and gas sector and reduce dependence on imports.

Sahaj

Sahaj was a digital initiative launched by oil marketing companies for release of LPG connection with online payment and issuance of 'e-SV' under the Digital India initiative and the facility is now available on pan-India basis.

Energy Security

The government has taken number of key policy initiatives in upstream hydrocarbon sector to augment domestic production of oil and natural gas in the country. With a view to increase domestic production of oil and gas, the Discovered Small Field (DSF) Policy was notified for monetisation of discovered small fields of ONGC and OIL, which had not been put into production. Under the policy, 30 contract areas were awarded for development through International Competitive Bidding (ICB).

Pricing of Petroleum Products

The Administered Pricing Mechanism (APM) or cost plus pricing for petroleum products which was introduced in 1976 was abolished from 2002, consequent to the de-regulation of the oil sector in India. The government notified that pricing of all petroleum products except PDS kerosene and domestic LPG would be market determined.

Energy Diplomacy

India is the 3rd largest consumer of energy resources in the world, next only to USA and China. It is also the 3rd largest importer of crude oil and 4th largest importer of LNG in the world. Dependency on imported crude oil and natural gas are 85 per cent and 53 per cent respectively for the year 2019-20. The high dependency on imports and over-reliance on the Middle-East and OPEC has significant implications on the energy security.

Towards strengthening energy security, India's energy diplomacy is focused on sustaining and promoting energy engagements with countries rich in hydrocarbon resources and also with prominent international organisations dealing with energy matters. India's energy diplomacy has been playing the key role in responsible pricing by producing countries, renegotiation of contract for LNG supply, diversification of the sources of crude and LNG imports as well as maintaining uninterrupted supply of crude oil and LPG even after the frequent turmoil in the Middle-East region. Through India's energy diplomacy, the energy cooperation has been strengthened by elevating from mere buyer-seller to the level of

strategic partners. Both Saudi Arabia and UAE are partners in the strategic petroleum reserve programme.

International Organisations

India has been persistently elevating the engagement with prominent International organisations (OPEC, IEA, IEF) through interaction on regular basis at ministerial levels including forums like Asian Ministerial Energy Roundtable, G20, etc. India and OPEC share great complementarity—for India, OPEC is the largest supplier of crude oil and LPG, while India is the world's 3rd largest importer of oil. OPEC is an extremely important partner for India. India is working to become a gas-based economy by increasing the share of natural gas in energy mix from 6.3 per cent to 15 per cent by 2030.

Strategic Petroleum Reserves

Government of India, through Indian Strategic Petroleum Reserve Ltd. (ISPRL), has set up Strategic Petroleum Reserves (SPR) at three locations with a capacity of 5.33 MMT located at Visakhapatnam, Mangaluru and Padur. The crude oil stored can be used in emergency situations. These three SPRs can meet approximately 9.5 days of national demand.

Ministry is also exploring possibility to lease SPRs outside India and USA is one of the options being considered. This will increase the country's strategic oil stockpile and boost India's energy security.

Hindustan Petroleum Corporation Limited

Hindustan Petroleum Corporation Limited (HPCL) is a mega Public Sector Undertaking (PSU) with 'Navratna' status. It has two refineries: one in Mumbai (west coast) having a capacity of 6.5 MMTPA and the other in Visakhapatnam (east coast) with a capacity of 8.3 MMTPA. These refineries are producing a wide variety of petroleum products-fuels, lubricants and specialty products. HPCL holds an equity stake of 16.95 per cent in Mangalore Refinery and Petrochemicals Limited, a state-of-art refinery at Mangalore with a capacity of 9.69 MMTPA.

The marketing network of HPCL consists of 13 zonal offices in major cities and 101 regional offices, facilitated by a supply and distribution infrastructure comprising terminals, civiation service facilities, LPG bottling plants, lube filling plants, inland relay depots, etc. HPCL has

state-of-the-art information technology infrastructure to support its core business. The data centre is located at Hitech city in Hyderabad.

Website: www.hindustanpetroleum.com

Gas Authority of India Limited

The setting up of Gail (India) Limited, formerly known as Gas Authority of India Limited in 1984 heralded a new era of natural gas in the country. Starting as a natural gas transmission company, it is today an integrated energy company in the natural gas value chain with a global footprints. Having started as a gas transmission company, it grew organically over the years by building a large network of natural gas trunk pipelines coveringa length of over 8,700 km. Further, to strengthen position as India's premier integrated gas company, GAIL has set up LNG import infrastructure and is focusing on areas like city gas distribution, petrochemicals business, diversifying into high margin downstream areas in gas value chain and creating a portfolio of renewable business.

Website : www.gailonline.com

Indian Oil Corporation Limited

Indian Oil Corporation (Indian Oil) is India's flagship national oil company with business interests encompassing the entire hydrocarbon value chain—from refining, pipeline transportation and marketing of petroleum products to exploration and production of crude oil and gas, marketing of natural gas, petrochemicals, renewable energy and now into nuclear energy. The Indian Oil Group of companies own and operate 10 of India's 22 refineries with a combined refining capacity of 213.2 million metric tonnes per annum. Indian Oil's crosscountry network of crude oil and product pipeline spans 10,909 km with a capacity of 75.55 MMTPA of crude oil and petroleum products and 96 Million Metric Standard Cubic Meter per Day (MMSCMD) of gas. This network is the largest in the country and meets the vital energy needs of the consumers in an efficient, economical and environment-friendly manner.

Indian Oil supplies precious petroleum products through an unmatched countrywide network of above 38,000 touch points, which correspond to about 52 per cent of the industry infrastructure. It operates more than 20,000 outlets, the largest and most extensive network of retail outlets. The Corporation's Indane cooking gas reaches the doorsteps of

about 65 million households through about 5,934 distributors. These efforts are backed by supplies from 139 terminals and depots, 96 aviation fuel stations and 89 Indane bottling plants. About 6,218 bulk consumer pumps are also operational for the convenience of large consumers, ensuring product and inventory at their doorstep.

Over the years, Indian Oil has grown by expanding its own operations, bringing independent refineries like Chennai Petroleum Corporation Ltd (CPCL) and Bongaigaon Refinery and Petrochemicals Ltd. (BRPL) under its fold, by merging Assam Oil Company (AOC) and IBP Co. Ltd with itself, thus synergising its refining as well as marketing operations. Having set up subsidiaries in Sri Lanka, Mauritius and the United Arab Emirates, Indian Oil is simultaneously scouting for new business opportunities in the energy markets of Asia and Africa.

Website: www.iocl.com

Bharat Petroleum Corporation Limited

Bharat Petroleum Corporation Limited (BPCL) is an integrated oil company, in the downstream sector, engaged in refining of crude oil and marketing of petroleum products. It has also diversified into production and marketing of petrochemical feedstock. BPCL has refineries at Mumbai and Kochi with a combined refining capacity of 21.5 MMTPA. Both the refineries are certified under Integrated Management System (IMS) which aims for a unified approach in processes, interfaces, structures and documentation systems by combining the individual management systems under ISO 9001, ISO 14001 and OHSAS 18001 reflecting the continuing commitment towards quality, environment, health and safety.

BPCL has a robust distribution network comprising major storage installations and depots: LPG bottling plants, 1938 km cross-country pipeline and two lubricant blending plants.

Website: www.bharatpetroleum.com

Oil and Natural Gas Corporation Limited

Oil and Natural Gas Corporation Ltd. (ONGC), engaged in exploration and production of crude oil, natural gas and value added products was incorporated in 1993 under Companies Act, 1956, pursuant to government's decision to transform the statutory commission into a

Public Limited Company, through an Act of Parliament [Oil and Natural Gas Commission (Transfer of Undertaking and Repeal, Act, 1993)].

Website: www.ongcindia.com

ONGC Videsh Limited

ONGC Videsh Limited (OVL), is engaged in exploration and production of oil and gas outside India. OVL was incorporated as Hydrocarbons India Limited in 1965 to perform international exploration and production business. The company was rechristened as ONGC Videsh Limited from 1989. It has participated either directly or through its wholly owned subsidiaries/joint venture companies in 30 projects in 15 countries of which nine projects are operated by OVL, 7 are jointly operated and 14 managed through participating interest. Currently, OVL has oil and gas production from 10 projects in eight countries, namely, Russia (Sakhalin-1 and Imperial Energy); Syria (Al-Furat Petroleum Co.); Vietnam (Block 06.1); Colombia (MECL); Sudan (Greater Nile Petroleum Operating Company); South Sudan (Greater Pioneer Operating Company and Sudd Petroleum Operating Company); Venezuela (San Cristobal); and Brazil (BC-10). There are five projects where hydrocarbons have been discovered and are at various stages of development.

Website: www.ongcvidesh.com

Bharat Petro Resources Limited

Bharat Petro Resources Limited (BPRL), formed in 2006, is a wholly owned subsidiary and Exploration and Production (E&P) arm of Bharat Petroleum Corporation Limited (BPCL). While BPCL is engaged in the midstream and downstream segment in India, BPRL carries out upstream activities both in India and overseas.

Website: www.bharatpetroresources.in

Oil India Limited

Oil India Limited (OIL), a Government of India enterprise, is engaged in the business of exploration, production and transportation of crude oil and natural gas. In 1959, Oil India Private Limited was incorporated to expand and develop the newly discovered oil fields of Naharkatiya and Moran in Assam. In 1961, it became a joint venture company between the Indian government and Burmah Oil Company Limited, UK. In 1981, OIL

India Pvt. Ltd. became a wholly-owned Government of India enterprise. In-country operational areas are spread over Assam, Arunachal Pradesh, Mizoram, Bihar, Andhra Pradesh, Puducherry, Andaman and Rajasthan. OIL has presence in nine countries, viz., Venezuela, Libya, Gabon, Iran, Nigeria, Yemen, Sudan, Timor Leste and Egypt, pursuing various activities.

In addition, OIL owns and operates a trunk crude oil pipeline in the north east region of the country for transportation of crude oil to feed Numaligarh, Guwahati and Bongaigaon refineries. OIL also owns and operates a branch line to feed Digboi refinery.

Website: www.oil-india.com

New and Renewable Energy

Ministry of New and Renewable Energy (MNRE) is the nodal ministry at the federal level for all matters relating to new and renewable energy. The Ministry has been facilitating the implementation of broad spectrum programmes including harnessing renewable power, renewable energy to rural areas for lighting, cooking and motive power, use of renewable energy in urban, industrial and commercial applications and development of alternate fuels and applications.

Website: www.mnre.gov.in

Indian Scenario

Over the years, renewable energy sector in the country has emerged as a significant player in the grid connected power generation capacity. It supports the government agenda of sustainable growth, while, emerging as an integral part of the solution to meet the nation's energy needs and an essential player for energy access. It has been realised that renewable energy has to play a much deeper role in achieving energy security in the years ahead and be an integral part of the energy planning process. Renewable energy sector landscape in India has, during the last few years, witnessed tremendous changes in the policy framework with accelerated and ambitious plans to increase the contribution of solar energy. There is a perception that renewable energy can now play a significant role, as also, there is a confidence in the technologies and capacity to do so. Enlarging the scope of the National Solar Mission

symbolises both, and indeed encapsulates the vision and ambition for the future.

Drivers for Development

At present around 69.5 per cent of India's power generation capacity is based on coal. In addition, there is an increasing dependence on imported oil, which is leading to imports of around 33 per cent of India's total energy needs. Despite increase in installed capacity by more than 113 times, India is still not in a position to meet its peak electricity demand as well as energy requirement. The peak power deficit during financial year 2001 -02 was 12.2 per cent, approximately 9,252 MW, however, at the end of 2014-15, the peak power deficit decreased to the order of 2.4 per cent. As a fallout of this situation, planned and un-planned measures were undertaken by the government and utilities to bridge this demand-supply gap. India faces a challenge to ensure availability of reliable and modern forms of energy for all its citizens. Almost 85 per cent of rural households depend on solid fuel for their cooking needs and only 55 per cent of them have access to electricity. However, even with this low access, most rural households face issues with quality and consistency of energy supply. Lack of rural lighting is leading to large-scale use of kerosene. This usage needs to be reduced, as it leads to increased subsidies and import dependence, and consequent pressure on foreign exchange reserves.

India has taken a voluntary commitment of reducing emission intensity of its GDP by 33-35 per cent from 2005 levels by 2030. In the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) held at Paris, France, India committed to achieve about 40 per cent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF).

Renewable Energy Potential

India has an estimated renewable energy potential of about 900 GW from commercially exploitable sources, viz., wind -102 GW (at 80 metre mast height); small hydro - 20 GW; bioenergy - 25 GW; and 750 GW solar power, assuming 3 per cent wasteland is made available. The Ministry had taken up a new initiative in 2014 for implementation of

wind resource assessment in uncovered/new areas with an aim to assess the realistic potential at 100 m level in 500 new stations across the country under the National Clean Energy Fund (NCEF). National Institute of Wind Energy has used advanced modelling techniques and revised the estimate the wind power potential at 100 metre at 302 GW.

Renewable energy has a great potential to usher in universal energy access. In a decentralised or stand-alone mode, renewable energy is an appropriate, scalable and viable solution for providing power to un-electrified or power deficient villages and hamlets. Over 1.2 million households are using solar energy to meet their lighting energy needs and almost similar number of the households meet their cooking energy needs from biogas plants. Solar Photovoltaic (PV) power systems are being used for a variety of applications such as rural electrification, railway signalling, microwave repeaters, mobile towers, TV transmission and reception and for providing power to border outposts.

Renewable energy database is updated regularly in the country. The National Institute of Wind Energy (NIWE), formerly known as Centre for Wind Energy Technology, has developed the Wind Atlas of India. NIWE also collects data from Solar Radiation Resource Assessment stations to assess and quantify solar radiation availability and develop Solar Atlas of the country. National Institute of Solar Energy has assessed the state-wise solar potential by taking 3 per cent of the wasteland areata be covered by Solar PV modules. The Indian Institute of Science, Bengaluru has developed Biomass Atlas of India, and the Alternate Hydro Energy Centre, Indian Institute of Technology, Roorkee has assessed small hydro potential in the country.

Renewable Energy for Rural Applications

The Ministry of New and Renewable Energy (MNRE) is implementing and supporting Biogas Schemes for dissemination and deployment of biogas plants in remote, rural and semi-urban areas of the country. Biogas production is based on the anaerobic digestion of organic wastes/materials. This gas is cheap, clean and environment friendly gaseous fuel for cooking, lighting and running biogas engines for motive power and electricity generation on farms. The biogas plant digested slurry contains enriched organic Nitrogen, Phosphorus and Potash (NPK)

and also other major plant micronutrients free from weed seeds, smell and pathogens. The application of recommended dose of biogas slurry increase the yield by 12 per cent to 35 per cent of all types of crops, fruits and vegetables. The biogas slurry can be used in any form, viz., liquid, semi-solid or dried and in any type of soils for any crop.

New National Biogas and Organic Manure Programme

The New National Biogas and Organic Manure Programme (NNBOMP) is being implemented with the objective to provide clean cooking fuel and to meet lighting, thermal and small power needs of farmers/dairy farmers/users including individual households and to improve organic manure system based on bioslurry from biogas plants in rural and semi-urban areas by setting up of biogas plants. The programme has multiple benefits. It is helpful in mitigating hardship of rural women. It saves time and energy of rural people, which can be used for other livelihood activities. It also reduces pressure on forests and improves sanitation in rural and semi-urban areas.

National Solar Mission

Launched in January 2010, the National Solar Mission (NSM) was the first mission to be operationalised under the National Action Plan on Climate Change (NAPCC). Using a three-phase approach, the mission's objective is to establish India as a global leader in solar energy, by creating the policy conditions for solar technology diffusion across the country as quickly as possible.

A range of policy instruments has been adopted to implement this mission. The revised tariff policy requires all states to reach 10.5 per cent solar Renewable Purchase Obligation (RPO) by the year 2022. Solar water heaters and rooftop solar systems have been promoted in government, commercial and residential areas through regulatory intervention such as mandates under building by-laws and its incorporation in the National Building Code. Off-grid and rooftop solar applications have been promoted through provision of subsidies from the central government. Research and development is also being encouraged through approvals of R&D projects and the establishment of centres of excellence by the Ministry. These measures led to the decline in purchase prices of solar power in the country.

Solar/Green Buildings Programme

The Ministry has been implementing a Scheme on Energy Efficient Solar Green Buildings since 2009, which aims to promote the widespread construction of energy efficient solar green buildings in the country through a combination of financial and promotional incentives. These are for capacity building, awareness, seminar and workshops and other promotional activities, etc.

Solar Cities Programme

The ”Development of Solar Cities” programme aims at minimum 10 per cent reduction in projected demand of conventional energy at the end of five years, which can be achieved through a combination of energy efficiency measures while enhancing supply from renewable energy sources. The Ministry assists municipal corporations and urban local bodies in preparation of a master plan for increasing energy efficiency and renewable energy supply in the city, setting-up institutional arrangements for the implementation of the Master Plan and awareness generation and capacity building activities.

Coal

The Ministry of Coal (MoC) has the overall responsibility of determining policies and strategies in respect of exploration and development of coal and lignite reserves, sanctioning of important projects of high value and for deciding all related issues. These key functions are exercised through its public sector undertakings, namely Coal India Limited (CIL) and Neyveli Lignite Corporation Limited (NLC) and Singareni Collieries Company Limited (SCCL), a joint sector undertaking of Government of Telangana and Government of India with equity capital in the ratio of 51:49.

Website : www.coal.nic.in

Coal Reserves

About 326.496 billion tonnes of coal reserves have been estimated by the Geological Survey of India. The reserves have been found mainly in Jharkhand, Odisha, Chhattisgarh, West Bengal, Madhya Pradesh, Telangana and Maharashtra.

Lignite Reserves

The lignite reserves in the country have been estimated at around 45.76 billion tonnes by the Geological Survey of India. The major deposits are located in Tamil Nadu, followed by Rajasthan, Gujarat, Kerala, West Bengal and union territories of Jammu and Kashmir and Puducherry.

Coal Production

The overall production of coal for 2019-20 was projected at 810 MT. During this period the actual production was 729.10 MT compared to 728.72 MT during corresponding period of previous year showing a growth of 0.05 per cent.

Coal India Limited

Coal India Limited (CIL) is a 'Maharatna' company under the Ministry of Coal, with headquarters at Kolkata, West Bengal. CIL is the single largest coal producing company in the world. CIL operates through 82 mining areas spread over eight provincial states of India. It has 429 mines of which 237 are underground, 166 open-cast and 26 mixed mines. CIL is the apex body in coal industry under the administrative control of the Ministry of Coal. Coal India is a holding company with seven wholly owned coal producing subsidiary companies and one mine planning and consultancy company. It encompasses the whole gamut of identification of coal reserves, detailed exploration followed by design and implementation and optimising operations for coal extraction in its mines. The producing companies are: Eastern Coalfields Limited (ECL), Sanctoria, West Bengal; Bharat Coking Coal Limited (BCCL), Dhanbad, Jharkhand; Central Coalfields Limited (CCD, Ranchi, Jharkhand; South Eastern Coalfields Limited (SECL), Bilaspur, Chhattisgarh; Western Coalfields Limited (WCL), Nagpur, Maharashtra; Northern Coalfields Limited (NCL), Singrauli, Madhya Pradesh; and Mahanadi Coalfields Limtied (MCL), Sambalpur, Odisha. The consultancy company is Central Mine Planning and Design Institute Limited (CMPDIL), Ranchi, Jharkhand.

Website: www.coalindia.in

Neyveli Lignite Corporation Limited

Neyveli Lignite Corporation Limited (NLC) was registered as a company in November 1956. The mining operations in Mine-I were

formally inaugurated in 1957. Neyveli Lignite Corporation has been conferred with 'Navratna' status since 2011. Its registered office at Chennai and corporate office at Neyveli in Tamil Nadu are pioneers among the public sector undertakings in the energy sector. NLC operates three open-cast lignite mines of total capacity of 28.5 million tonnes per annum at Neyveli and one open-cast lignite mine of capacity 2.1 million tonnes per annum at Barsingsar, Rajasthan, three thermal power stations with a total installed capacity of 2,490 MW at Neyveli and one thermal power station at Barsingsar, Rajasthan, with an installed capacity of 250 MW. All the mines of NLC are ISO certified for quality management system, environmental management system and occupational health and safety management system. NLC's growth is sustained and its contribution to India's social and economic development is significant.

Website: www.nlcindia.com

Singareni Collieries Company Limited

Singareni Collieries Company Limited (SCCL) is first and the oldest government owned coal mining company in the country with registered office at Kothagudem in Telangana. The equity of the company is held by the Telangana government (51 per cent) and the Government of India (49 per cent). The core business of SCCL is coal mining. However, the company is diversified into power generation, explosive manufacturing, sand processed from overburden, solar power generation, etc. Coal mining operations are spread in Godavari Valley Coal Field and presently operating 47 mines (27 underground and 20 open-cast) in Telangana. SCCL is contributing to around 9 per cent of country's total coal production to meet the requirements of major thermal stations in southern states.

Website: www.sccmines.com

12 Environment

THE Ministry of Environment, Forest and Climate Change (MoEF&CC) is the nodal agency in the central government for overseeing the implementation of India's environment and forest policies and programmes relating to conservation of the country's natural resources including lakes and rivers, its biodiversity, forests and wildlife, ensuring the welfare of animals and prevention and abatement of pollution. While implementing these policies and programmes, the Ministry is guided by the principle of sustainable development. The Ministry is also the nodal agency for the United Nations Environment Programme (UNEP), International Centre for Integrated Mountain Development (ICIMOD) and the United Nations Conference on Environment and Development (UNCED). The Ministry also coordinates with multilateral bodies such as the Commission on Sustainable Development (CSD), Global Environment Facility (GEF) and regional bodies such as Economic and Social Council for Asia and Pacific (ESCAP) and South Asian Association for Regional Cooperation (SAARC) on matters pertaining to environment.

Website: www.moef.nic.in

Botanical Survey of India

Botanical Survey of India (BSI) is the apex research organisation under Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt, of India for carrying out taxonomic and floristic studies on wild plant resources of the country. It was established in 1890 with the basic objective to explore the plant resources of country and to identify the plant species with economic virtues. Sir George King, the then Superintendent of the Royal Botanic Garden Calcutta, was appointed as first ex-officio Honorary Director of the BSI. After independence the department was reorganised in 1954 by Government of India as a part of scientific development of the country. During the successive plan periods, the functional base of BSI was further expanded to include

various new areas such as inventorying of endemic, rare and threatened plant species; evolving conservation strategies; studies on fragile ecosystems and protected areas, like wildlife sanctuaries, national parks and biosphere reserves, multiplication and maintenance of endemic and threatened plant species, wild ornamentals, etc., in Botanic Gardens and Orchidaria; and documentation of traditional knowledge associated with plants and development of National Database of herbarium specimens/live collection/ botanical paintings/illustrations, plant distribution and nomenclature, plant uses, etc.

Zoological Survey of India

The Zoological Survey of India (ZSI), a premier research institution under the Ministry has completed 100 years of service to the nation, undertaking survey, exploration and research leading to the advancement of our knowledge on the exceptionally rich faunal diversity of the country since its inception in 1916. Over the successive plan periods functions of ZSI have also expanded gradually encompassing areas like the Environmental Impact Assessment with regard to fauna; survey of conservation areas; status survey of endangered species; computerization of digitization of data on faunal resources; Environmental Information System (ENVIS) on faunal diversity; identification and advisory services; National Designated Repository of type and voucher specimens; supporting enforcement of Wildlife (Protection) Act, 1972; establishment of marine aquaria and Museum for awareness on conservation etc., and acts as a custodian of the National Zoological Collections. Headquarters are at Kolkata and 16 regional centres are located in different parts of the country.

Forest Survey of India

Forest Survey of India (FSI), a national level organisation under the Ministry is engaged in the assessment of the country's forest resources on a regular interval. Established in 1981, the Forest Survey of India succeeded the "Preinvestment Survey of Forest Resources" (PISFR), a project initiated in 1965 by Government of India with the sponsorship of Food and Agriculture Organisation and United Nations Development Programme. The main objective of PISFR was to ascertain the

availability of raw material for establishment of wood based industries in selected areas of the country. In its report in 1976, the National Commission on Agriculture (NCA) recommended the creation of a National Forest Survey Organisation for collection of reliable data through countrywide comprehensive forest resources survey at regular intervals. Consequently, PISFR was reorganised into FSI in June 1981. After a critical review of activities, the mandate of FSI was refined in 1986 in order to make it more relevant to the rapidly changing needs and aspirations of the country.

Biodiversity Conservation

The Convention on Biological Diversity (CBD) is one of the key agreements adopted during the Earth Summit held in Rio de Janeiro in 1992. The objective of CBD are: conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of benefits arising out of the use of genetic resources. Pursuant to the ratification of the CBD by India in 1994, several steps were initiated to meet the commitments under the Convention, and to realise the opportunities offered by the Convention. These efforts were aimed at bringing the legislative, administrative and policy regimes in tune with the three-fold objectives of the CBD. India enacted the Biological Diversity (BD) Act in 2002 to give effect to the provision of this Convention. India also prepared a National Biodiversity Action Plan (NBAP) in 2008, and an Addendum to NBAP in 2014 with 20 national targets on biodiversity.

The Nagoya Protocol on access and benefit sharing (ABS) adopted under the aegis of CBD in 2010, is aimed at fair and equitable sharing of benefits arising from the utilisation of genetic resources.

Biosphere Reserves

The idea of ‘Biosphere Reserves’ was intiated by UNESCO in 1973-7’4 under its Man and Biosphere (MAB) Programme. The MAB, launched in 1970 by UNESCO, is a broad-based ecological programme aimed to develop within the natural and social sciences a basis for the rational use and conservation of the resources of the biosphere and for the improvement of the relationship between man and the environment,

to predict the consequences of today's actions on tomorrow's world and thereby to increase man's ability to manage efficiently the natural resources of the biosphere.

The Indian National Man and Biosphere (MAB) Commitee identifies and recommends potential sites for designation as Biosphere Reserves, following the UNESCO's guidelines and criteria. There are 18 designated Biosphere Reserves (BRs) in all. Out of 18 Biosphere Reserves, 10 Biosphere Reserves have been included in the World Network of Biosphere Reserves of UNESCO.

Implementing organisations are the concerned states/UT government, environment and forest departments/line departments. Lead institutes identified for the Biosphere Reserves conduct research activities on the sanctioned research projects and periodic review and progress reports are evaluated by experts and the evaluation of the completed report is done by the designated committee.

Biodiversity Conservation Scheme Relating to Biosafety

The scheme on Biodiversity Conservation was initiated during 1991 -92 during the Eighth Plan period, to ensure coordination among various agencies dealing with the issues relating to conservation of biodiversity, and to review, monitor and evolve adequate policy instruments for the same. The main objective is implementation of Cartegena Protocol on Biosafety, UNEP-GEF Supported Capacity building Project on Biosafety (Phase-ll) Project and Strengthening of Biosafety Management System.

Cartagena Protocol on Biosafety (CPB): It was negotiated under the aegis of the Convention on Biological Diversity (CBD) and adopted in 2000. India is a party to the Protocol. The main objective of the Protocol is to ensure safe transfer, handling and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effect on the conservation of bio diversity, taking into account the risk to human health.

Forest Policy

Forest Policy Division deals with the National Forest Policy, 1988, Indian Forest Act, 1927, and its amendments including policy matters

and legislative matters of other ministries and state governments related to forests. The Division is the National Focal Division for the International Cooperation on United Nations Forum on Forestry (UNFF), Asia Pacific Forestry Commission (APFC), Asia Pacific Forest Invasive Species Network (APFISN), Committee on Forestry of FAO (COFO), UN-REDD and Centre for International Forestry Research (CIFOR) and International Poplar Commission of FAO.

Forest Protection

This Centrally Sponsored Scheme of intensification of Forest Management Scheme deals within forest fire management, to address the growing concern over adverse effects of forest fire. With this, the present Centrally Sponsored Scheme of Forest Fire Prevention and Management (FPM) was formulated.

Wildlife Conservation

There is a Wildlife Division of the Ministry that has two sub-divisions, namely, Project Elephant Division and Wildlife Division. In addition, there are three autonomous bodies. Wildlife Institute of India (Wll) for wildlife research and training, Central Zoo Authority (CZA) for conservation and zoo management and National Tiger Conservation Authority (NTCA). The NTCA has been constituted by converting the Project Tiger Directorate into an autonomous body for tiger conservation. The National Zoological Park in the capital is also a part of the Wildlife Wing of the Ministry.

Wildlife Division deals with the policy and law matters and knowledge management for facilitating processes and analysis for evolution of policy and law for conservation of biodiversity and protected area network. This Division of the Ministry provides technical and financial support to the state/UT governments for wildlife conservation under the Centrally Sponsored Scheme, Integrated Development of Wildlife Habitats; through Central Sector Scheme-Strengthening of Wildlife Division and Consultancies for Special Tasks; and through grants-in-aid to the Central Zoo Authority and Wildlife Institute of India, Dehradun.

The Government of India provides financial and technical assistance to the state/UT government for activities aimed at wildlife conservation

through the Centrally Sponsored Scheme, viz., 'Integrated Development of Wildlife Habitats'. The scheme has following three components: support to Protected Areas (national parks, wildlife sanctuaries, conservation reserves and community reserves); protection of wildlife outside protected areas; and recovery programmes for saving critically endangered species and habitats.

Asiatic Lion Conservation Project

This project was launched in January 2019, with an aim to protect and conserve the world's last ranging free population of Asiatic Lion and its associated ecosystem. It is aimed at strengthening the ongoing measures for conservation and recovery of Asiatic Lion with the help of state-of-the-art techniques/ instruments, regular scientific research studies, disease management and modern surveiIlance/patrolIing techniques.

Enhancement of Protected Area Network in the Country

The number of Protected Areas in the country has increased to 870 in 2019. The total area under Protected Areas is now 1,65,088.36 sq.kms.

Wildlife Crime Control Bureau

Wildlife Crime Control Bureau (WCCB) is a statutory multi-disciplinary body established under the Ministry, to combat organised wildlife crime in the country. The Bureau has its headquarters in New Delhi and five regional offices at Delhi, Kolkata, Mumbai, Chennai and Jabalpur; three sub-regional offices at Guwahati, Amritsar and Cochin; and five border units at Ramanathapuram, Gorakhpur, Motihari, Nathula and Moreh. It is mandated to collect and collate intelligence related to organised wildlife crime activities and to disseminate the same to state and other enforcement agencies for immediate action so as to apprehend the criminals; to establish a centralised wildlife crime data bank; coordinate actions by various agencies in connection with the enforcement of the provisions of the Act; assist foreign authorities and international organisations concerned to facilitate co-ordination and universal action for wildlife crime control; capacity building of the wildlife crime enforcement agencies for scientific and professional investigation into wildlife crime and assist state governments to ensure success in prosecutions related to wildlife crimes; and advise the Government of India on issues relating to wildlife crimes having national

and international ramifications, relevant policy and laws. The Wildlife Crime Control Bureau was constituted in 2007.

Central Zoo Authority

The Central Zoo Authority with its headquarters in New Delhi was established in 1992 under the provisions of the Wild Life (Protection) Act, 1972 to oversee the functioning of zoos in the country with the view to enhance their role in conservation. The main objective of the Central Zoo Authority is to enforce minimum standards and norms for upkeep and healthcare of animals in the Indian zoos; to control the mushrooming of ill-conceived, ill-planned zoos; to monitor and evaluate the existing zoos and to suggest ways and means for the improvement of zoos in the country so that they can be transferred into potent centres for ex-situ conservation of endangered wild fauna.

National Zoological Park

The National Zoological Park (NZP) was set up in 1959 under this Ministry. The main objective of the Park is to complement and strengthen the national efforts in conservation of the rich biodiversity of the country, particularly the wild fauna. To achieve this objective, protocol is adopted which includes: supporting the conservation of endangered species by attempting their coordinated breeding under ex-situ conditions and raise stocks for rehabilitating them in wild as and when it is appropriate and desirable; to inspire amongst zoo visitors empathy for wild animals, an understanding and awareness about the need for conservation of natural resources and maintaing ecological balance; and providing opportunities for scientific studies useful for conservation in general and creation of database for sharing between the agencies involved in in-situ and ex-situ conservation.

Project Elephant

Project Elephant (PE) was launched by the Government of India in 1991-92 as a centrally sponsored scheme with the objectives: to protect elephants, their habitat and corridors; to address issues of man-animal conflict; and ensure the welfare of domesticated elephants.

National Tiger Conservation Authority / Project Tiger

The National Tiger Conservation Authority (NTCA) is a statutory body under this Ministry constituted under enabling provisions of the Wildlife (Protection) Act, 1972, as amended in 2006, for strengthening tiger conservation. The NTCA has been fulfilling its mandate by retaining an oversight through advisories/ normative guidelines, based on appraisal of tiger status, ongoing conservation initiatives and recommendations of specially constituted committees. 'Project Tiger' is a Centrally Sponsored Scheme providing funding support to tiger range states, for in-situ conservation of tigers in designated tiger reserves, and has put the endangered tiger on an assured path of recovery by saving it from extinction.

Project Tiger

Project Tiger was launched in 1973 for conserving the tiger. From 9 tiger reserves since its formative years, the Project Tiger coverage has increased to 50, spread out in 18 of tiger range states. These reserves are constituted on a core/ buffer strategy. The core areas have the legal status of a national park or a sanctuary, whereas the buffer or peripheral areas are a mix of forest and non-forest land, managed as a multiple use area. It is an ongoing scheme of this Ministry providing central assistance to the tiger states for conservation. The NTCA/ Project Tiger also conducts the country level assessment of the status of tiger, co-predators, prey and habitat once in four years, using the refined methodology, as approved by the Tiger Task Force. Due to the concerted efforts under the Project, India has the distinction of having the maximum number of tigers in the world -2,967 - to be precise, as per the results of the 4th cycle of the All India Tiger Estimation. The tiger corridors for gene flow have been mapped in the GIS domain. After seeing the success of Project Tiger, the government updated the Wildlife Protection Act of 1972. This ensures that along with tigers, other wildlife also gets protected. One by one, every national park took an initiative to save endangered species. For example, Gir conserves lions, and Kaziranga conserves one-horned rhinos.

International Tiger's Day is held every year on 29th July to raise public awareness and support regarding several issues related to tiger conservation. The idea behind such an event came up at the St. Petersburg Tiger Summit in 2010. It was also decided that 29th July

would be known as Global Tiger Day. During the summit, a panel of experts declared a goal towards tiger conservation, which was to double its population by 2022. As per the fourth cycle results of India Tiger Estimation, the tiger estimate is 2,967.

Animal Welfare

Animal Welfare General - Animal Board of India

General Animal Welfare covers the welfare of individual animals, mainly domesticated, as also wild animals in captivity, through Animal Welfare Board of India (AWBI). AWBI is a statutory body established with headquarters at Chennai. Its basic mandate is to advise the government on animal welfare issues, and create awareness in animal welfare and to implement the regular schemes of AWBI and also the central sector schemes for the welfare of animals.

Free Mobile Animal Clinic

The Board is providing free, on-the-spot veterinary treatment to sick and injured animals belonging to the poor through its Mobile Animal Clinic (MAC) programme spreading awareness rallies conducted during World Animal Day Week. The Animal Welfare Board of India has organised rallies to create kindness and compassion with the co-ordination of schools in Chennai and Karuna International, Chennai, under the Humane Education programme.

Environmental Impact Assessment

Environmental Impact Assessment (EIA), is a planning tool to integrate environmental concerns into the developmental process from the initial stage of planning. It was first used in India as early as 1978 with river valley projects, and was subsequently extended to large public sector projects requiring Public Investment Board (PIB) clearance. These practices were formally codified for the first time in the EIA Notification, 1994. This made the requirement of environmental clearance mandatory for 37 categories of projects/ processes, listed therein. The criterion of investment was the basis for the projects requiring environmental clearance in different sectors.

Control of Pollution

Air Pollution

Rising issue of air pollution is increasingly becoming a serious concern, particularly in metro cities. A large number of cities and towns do not meet the standards for pollutants specifically for particulate matter. In a few cities including Delhi, the ambient particulate matter concentrations are much above the standards i.e., three to four times or even higher. Air quality regulation and actions for abatement of airpollution is undertaken under various provisions of Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act (EPA), 1986 which prescribes the mechanism and authorities for handling the issue. The major impact is highlighted with reference to health of people. As per the available data for Delhi and NCR for last five years, Particulate Matter (PM 10 and PM 2.5) concentrations are a major concern for the entire area; and a few violations are observed in $N0_2$ concentrations in Delhi, Meerut and Faridabad. The concentration of $S0_2$ is within the standard limit at all the locations in all the last five years. PM10 are inhalable coarse particles, which are particles with a diameter between 2.5 and 10 micrometers (um) and PM 2.5 are fine particles with a diameter of 2.5 um or less.

Measures to Combat Air Pollution

National Ambient Air Quality Standards envisaging 12 pollutants have been notified under the EPA, 1986 along with 115 emission/effluent standards for 104 different sectors of industries, besides 32 general standards. Government is executing a nation-wide programme of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP). The network consists of 691 manual operating stations covering 303 cities/towns in several states and union territories. With reference to vehicular pollution, the steps taken include introduction of cleaner/alternate fuels like gaseous fuel (CNG, LPG, etc.); ethanol blending; universalisation of BS-IV by 2017; leapfrogging from BS-IV to BS-VI fuel standards by April 1,2020; on going promotion of public transport network of metro, buses, e-rickshaws and promotion of carpooling; streamlining granting of Pollution Under Control Certificate; lane discipline; vehicle maintenance; etc.

National Air Quality Index (AQI) was launched in 2015 starting with 14 cities and then extended to 34. A Graded Response Action Plan for

control of air pollution in Delhi and NCR region has been notified. This plan specifies actions required for controlling particulate matter PM emissions from various sources) and prevent PM 10 and PM 2.5 levels to go beyond 'moderate' national Air Quality Index (AQI) category. The measures are cumulative. Emergency and severe levels include cumulatively all other measures listed in the lower levels and AQI including very poor, poor and moderate. Actions listed in the poor to moderate category need to be implemented thoughoutthe year. Central Pollution Control Board (CPCB) has issued a comprehensive set of directions for implementation of 42 measures to mitigate air pollution in major cities including Delhi and NCR. In order to involve people in the efforts, the government launched a campaign called 'Harit Diwali and Swasth Diwali' in 2017 involving over 200 schools in Delhi and over two lakh schools in the country. A mini marathon for 'Swachh Hawa for Swachh and Swasth Bharat' was also organised in 2017.

Noise Pollution

As a follow-up of Section 5.2.8 (IV) of National Environmental Policy (NEP)-2006, ambient noise has been included as a regular parameter for monitoring in specified urban areas. Protocol for National Ambient Noise Monitoring Network Programme has been prepared and circulated to state pollution control boards. Central Pollution Control Board in association with state pollution control boards established Real Time National Ambient Noise Monitoring Network in 7 metropolitan cities and installed 70 noise monitoring systems in Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Lucknow and Hyderabad. The steps taken to reduce noise pollution, inter alia, include advisories for noise monitoring on the occasion of Diwali; prohibition of the use of fireworks between 10.00 p.m. and 06.00 a.m.; publicity regarding the ill-effects of firecrackers, sensitisation of students through course curriculum besides general awareness building of public at large to avoid bursting of firecrackers; and issuance of directions under Section 5 of Environment (Protection), Act, 1986 and under Section 18 (1) (b) of Air (Prevention and Control of Pollution) Act, 1981.

Scheme of Common Effluent Treatment Plants

The concept of the Common Effluent Treatment Plants (CETPs) arose in order to make a co-operative movement for pollution control. The

main objective of the CETPs is to reduce the treatment cost to be borne by an individual member unit to a minimum while protecting the environment to a maximum. Wastewater treatment and water conservation are the prime objectives of the CETP. This concept was envisaged to treat the effluent emanating from the clusters of compatible small-scale industries.

A centrally sponsored scheme has been undertaken by the government for enabling small scale industries (SSI) to set up new and upgrade the existing common effluent treatment plants to cover all the states in the country. The salient features of the revised scheme include: (a) the central subsidy has been enhanced from 25 per cent to 50 per cent of the project cost; (b) all the three levels of treatment, primary, secondary and tertiary are to be covered for assistance; and (c) the management of the Common Effluent Treatment Plants (CETP) is to be entrusted to a Special Purpose Vehicle registered under an appropriate statute.

Hazardous Substance Management

The Hazardous Sustances Management Division (HSMD) is the nodal point within the Ministry for management of solid waste including hazardous substances and chemical emergencies. The main objective of the Division is to promote safe management of solid wastes, management of hazardous substances and wastes including hazardous chemicals, in order to avoid damage to health and environment.

In addition, the Division also administers the Public Liability Insurance Act, 1991 and rules framed thereunder. The activities of the Division are carried out under three main thrust areas, viz., hazardous waste management, solid waste management and chemical safety.

Chemical Safety

In order to ensure chemical safety, the Ministry notified two sets of Rules under the Environment (Protection) Act, 1986, viz., (i) The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC); and (ii) The Chemical Accidents (Emergency, Planning, Preparedness, and Response) Rules (EPPR), 1996. The main objectives of the MSIHC rules are to: (a) prevent major accidents arising from industrial activities; and (b) limit the effects of such accidents. The rules endeavour to achieve these objectives by having a quantity-based

approach. The MSIHC rules require the occupier to disclose the necessary information to the public in the neighbourhood that is likely to be affected by a major accident at the site. During the process of implementation of MSIHC Rules, 1989, it was felt that a Chemical Crisis Management System has to be established in the country to ensure proper coordination of the activities of the various authorities and to render help to the District Collector who is responsible for the preparation, maintenance and execution of an Off-Site Emergency Plan. Therefore, a set of rules entitled Chemicals Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 was notified with the aim of providing administrative structure at different levels such as national, state, district and local levels for effective planning, preparedness and responses to chemicals accidents and also ensuring availability of information to public likely to be affected by an accident. The Chemical Accidents (EPPR) Rules, 1996, envisage a four-tier crisis management system in the country at the central, state, district and local levels.

Hazardous Waste Management

To address the issue of ensuring environmentally sound management of hazardous waste for safety of health and environment during handling of such waste, Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008, were notified under Environment (Protection) Act, 1986. The Rules lay down procedure towards this process by providing provisions for authorisation of units generating and hsing hazardous waste. It also provides for establishment of Treatment Storage and Disposal Facility (TSDF) for disposal of hazardous wastes. The rules have an important provision on regulation of import/export of hazardous waste in pursuance to our obligation under the Basel Convention on the Control of Transboundary Movements of Hazardous wastes and their Disposal. India is party to the Convention.

The major salient features of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 include the following: the ambit of the Rules has been expanded by including ‘Other-Waste’; authorisation and registration requirement is replaced with one permission, i.e., authorisation under the rules for all stakeholders handling the hazardous and other waste; waste management hierarchy in the sequence of priority as prevention, minimisation, reuse, recycling,

recovery, co-processing; and safe disposal being incorporated; the process of import/export of waste under the rules has been streamlined by simplifying the procedure and by revising the list of waste regulated for import/ export; and a separate schedule has been introduced which comprises waste such as metal scrap, paper waste and various categories of electrical and electronic equipments for re-use purpose exempted from the need of obtaining Ministry's permission. The list of waste prohibited for import has been revised by inclusion of following items: waste edible fats and oils of animals or vegetable origin; household waste; critical care medical equipment; solid plastic wastes; other chemical wastes especially in solvent form.

e-Waste Management

The e-waste rules apply to e-waste generated from IT and telecommunication equipment and consumer electrical and electronics namely television sets (including LCD & LED), refrigerators, washing machines and air-conditioners. These rules empower the concerned state agencies to control, supervise and regulate relevant activities connected with e-waste management such as collection, segregation, dismantling and recycling. Producers are required to set up collection systems and meet the cost involved in the environmentally sound management of e-waste generated from the 'end of life' of their own products. Besides, threshold limits, which are accepted globally have been prescribed for six hazardous substances used in manufacture of electrical and electronics components. Producers are expected to achieve reduction in use of the hazardous substances (RoHS) to the prescribed limit. These rules are the main instrument to ensure environmentally sound management of e-waste.

Solid Waste Management

Solid Waste Management Rules, 2016

The Ministry revised the rules for management of solid waste in the municipal areas after 16 years. The new rules are now applicable beyond municipal areas and extend to urban agglomerations; census towns; notified industrial townships; areas under the control of Indian Railways; airports, airbase; port and harbour; defence establishments' special economic zones; state and central government organisations, places of

pilgrimage, religious and historical importance. The segregation of waste at source has been mandated. Responsibilities of generators have been fixed for segregation of waste into three streams, wet (biodegradable), dry (plastic, paper, metal, wood, etc.) and domestic hazardous wastes (diapers, napkins, empty containers of cleaning agents, mosquito repellents, etc.). The Rules provide ways for integration of waste pickers/rag pickers. The Rules mandate local bodies to frame their bye-laws to impose a 'User Fee', to be paid by the generator to waste collector and a 'Spot Fine' for littering and non-segregation. The concept of partnership as envisaged under Swachh Bharat has been introduced viz., bulk and institutional generators, market associations, event organisers and hotels and restaurants have been directly made responsible for waste segregation and management in partnership with local bodies. All resident welfare and market associations, gated communities and institutions with an area >5,000 sq.m., new townships and group housing societies have been made responsible to develop in-house waste handling, and processing arrangements for biodegradable waste.

Plastic Waste Management Rules, 2016

It is a known fact that plastic has multiple uses and the physical and chemical properties lead to their commercial success but inevitably their indiscriminate disposal has become a major threat to the environment. In particular, the plastic carry bags are the biggest contributors of the littered waste and every year, millions of plastic bags end up in the environment vis-a-vis soil, water bodies, water courses, and it takes an average of one thousand years to decompose completely. Therefore, to address the issue of scientific plastic waste management, new regulations namely, the Plastic Waste (Management and Handling) Rules, 2011, were notified in 2011 which included plastic waste management. However, the implementation of these rules was not so effective because their ambit was limited to notified municipal areas whereas today, the plastic has reached our rural areas also. To address these issues and with an objective to set up self-sustainable waste management system, the Ministry notified the Plastic Waste Management Rules, 2016. The Rules provide for: (i) increase in minimum thickness of plastic carry bags from 40 to 50 microns; (ii) first time cover and stipulate minimum thickness of 50 microns for plastic sheets being used for packaging and wrapping

commodities to facilitate collection and recycle of plastic waste; (iii) revamped pricing mechanisms for plastic carry bags by introducing plastic waste management fee to be paid by retailers/street vendors willing to provide carry bags as pre-registration charge; (iv) ways and means to promote gainful utilization of plastic waste such as energy recovery, in road construction, etc.; and (v) introducing user charge and spot fines by the local authority.

Construction & Demolition Waste Management, 2016

The Ministry for the first time notified the separate set of rules for management of construction and demolition waste in the country as Construction and Demolition Management Rules, 2016. Prior to these Rules, this was regulated under the Municipal Solid Waste Management Rules, 2000, and was left at the discretion of the urban local bodies. The new rules regulate waste generated from construction, re-modeling, repair and demolition of any civil structure and make a way forward to reuse, recycle such waste in gainful manner. The new rules will apply to everyone who generates construction and demolition waste-building materials, debris, and rubble waste from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority. Under the rules every waste generator has been made responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated separately, deposit at collection centre so made by the local body or handover it to the authorised processing facilities, ensure that there is no littering or deposition so as to prevent obstruction to the traffic or the public or drains. The service providers are required to prepare a comprehensive waste management plan covering segregation, storage, collection, reuse, recycling, transportation and disposal of construction and demolition waste generated within their jurisdiction. They are also responsible for removal of all construction and demolition waste.

Fly Ash Utilisation

The fast-increasing demand of power coupled with its dependence on coal for about 2/3rd of its energy requirement is leading to generation of large volume of fly ash. The management of fly ash has been a matter of concern in view of requirement of large area of land for its disposal. To address the environmental problems of fly ash disposal, the Ministry

issued notification on fly ash utilization in 1999 prescribing the targets for the fly ash utilisation for coal/lignite power based thermal power stations with the aim to achieve 100 per cent utilisation in a phased manner. The notification was amended in 2003, 2009 and in 2016. The utilisation of fly ash has increased from 6.64 million ton in 1996-97 to a level of 107.77 million ton in 2015-16. Fly ash earlier considered to be ”hazardous industrial waste” material, is now considered to be a useful and saleable commodity. The objectives of this notification are to protect environment, conserve the top soil, prevent dumping of fly ash from thermal power stations on land and to promote utilisation of ash in the manufacture of building materials and construction activity.

International Conventions

Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989 in Basel, Switzerland. The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effets of hazardous wastes. Its scope of application covers a wide range of wastes defined as ”hazardous wastes” based on their origin and/or composition and their characteristics, as well as two types of wastes defined as ”other wastes” (household waste and incinerator ash).

Rotterdam Convention

The Rotterdam Convention on the prior informed consent procedure for certain Hazardous Chemicals and Pesticides in International Trade came into force in 2004. India acceded to the convention a year later. The Designated National Authorities (DNAs) for India are in Ministry of Agriculture and Farmers Welfare. The Official Contact Points (OCPs) are designated in Ministry of Environment, Forest and Climate Change. There are 47 chemicals listed in Annex III to this Convention, which include 33 pesticides and 14 industrial chemicals that have been banned or severely restricted for health or environmental reasons by two or more parties and which the Conference of Parties (COPs) has decided to subject to the Prior Informed Consent (PIC) procedure.

Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs) is a global treaty to protect human health and the environment from POPs. The Convention sought initially 12 chemicals, for restriction or elemination of the production and release. Now, the Convention covers 23 chemicals. The Convention came into force in 2004. India ratified the Convention in 2006. As per Article 7 of the Convention, Parties to the Convention were required to develop a National Implementation Plan (NIP) to demonstrate how their obligations to the Convention would be implemented and NIP has been developed through Global Environment Facility (GEF) funding. Ministry of Environment, Forest and Climate Change serves as the focal point for GEF and Stockholm Convention. Designated national authorities are in Ministry of Agriculture and Farmers Welfare and Ministry of Chemicals and Fertilisers.

Minamata Convention on Mercury

In February 2009, the Governing Council of UNEP adopted Decision 25/5 on the development of a global legally binding instrument on mercury. At the Conference of Plenipotentiaries held in 2013 in Minamata and Kumamoto, Japan, the ”Minamata Convention on Mercury”, a global treaty to protect human health and the environment from the adverse effects of mercury, was formally adopted.

Strategic Approach to International Chemicals Management

In 2006, over 190 countries including India acceded to the Strategic Approach to International Chemicals Management (SAICM), an international policy framework to foster sound management of chemicals. Initial activities under SAICM included development or updating of national chemicals profiles, strengthening of institutions, and mainstreaming sound management of chemicals in national strategies. Towards this end, India initiated the preparation of the National Chemicals Management Profile to assess India’s infrastructure and capacity for management of chemicals.

National River Conservation Plan

The river conservation programme was initiated with the launching of the Ganga Action Plan (GAP) in 1985. The Ganga Action Plan was expanded to cover other rivers under National River Conservation Plan (NRCP) in 1995. The objective of NRCP is to improve the water quality

of rivers, which are major water sources in the country, through implementation of pollution abatement works in various towns along identified polluted stretches of rivers on cost sharing basis between the central and state governments.

National Plan for Conservation of Aquatic Ecosystems

The Wetlands Division of the Ministry looks after policies relating to the conservation and wise use of wetlands. The National Plan for Conservation of Aquatic Eco-systems (NPCA) is a single conservation programme for both wetlands and lakes. It covers activities such as interception, diversion and treatment of wastewater, shoreline protection, lake front development, in-situ cleaning, i.e., desilting and de-weeding, storm water management, bioremediation, catchment area treatment, lake beautification, survey and demarcation, bio-fencing, fisheries development, weed control and biodiversity conservation along with encouraging community participation and creating awareness.

Conservation of Wetlands

Wetlands are lifeline for a very large number of people and an important source of fresh water to mankind. They provide a host of ecosystem services to humanity, in addition to being host to rich biodiversity. However, due to anthropogenic activities, wetlands are getting degraded. Major pressures on wetlands include fragmentation of hydrological regimes, siltation from degraded catchments, pollution, spread of invasive species and over-harvesting of resources.

To control degradation and conserve wetlands, the National Wetland Conservation Programme (NWCP) was initiated in 1987 and financial assistance is being provided to the state governments for implementing action plans for conservation and management of identified wetlands.

Ramsar Convention

As a commitment for conserving potential wetlands, India became a signatory to the Ramsar Convention in 1982. As per this convention, India is committed for international cooperation and to take national action for conservation and wise use of wetlands. At present there are 26 Ramsar sites in India.

Wetlands (Conservation and Management) Rules

To implement the objectives of the convention, a regulatory mechanism was put in place through Wetlands (Conservation and Management) Rules in December 2010 vide GSR-951 (E). Central Wetland Regulatory Authority (CWRA) has been constituted under the Wetlands Rules, 2010. About 25 wetlands spread over 14 states have already been notified under these Rules.

World Wetland Day

Each year, World Wetland Day is celebrated on 2nd February for increasing awareness and spreading the need for conservation and wise use of wetlands all over the world. The World Wetland Day-2017 with the theme 'Wetlands for Disaster Risk Reduction' was celebrated in collaboration with the Government of Madhya Pradesh at Bhoj Wetlands, Bhopal, one of the 26 Ramsar sites that India has designated under the Ramsar Convention.

National Afforestation and Eco-Development Board

In order to promote afforestation, tree planting, ecological restoration and eco-development activities in the country, the National Afforestation and Eco-Development Board (NAEB) was set up in 1992. Special attention is also given by NAEB to the regeneration of degraded forest areas and lands adjoining forest areas, national parks, sanctuaries and other protected areas as well as the ecologically fragile areas like the Western Himalayas, Aravallis, Western Ghats etc.

The objectives of the NAEB include: evolve mechanisms for ecological restoration of degraded forest areas and adjoining lands through systematic planning and implementation; restore, through natural regeneration or appropriate intervention, the forest cover in the country for ecological security and to meet the fuelwood, fodder and other needs of the rural communities; sponsor research and extension of findings to disseminate new and proper technologies for the regeneration and development of degraded forest areas and adjoining lands; create general awareness and help foster a people's movement for promoting afforestation and eco-development with the assistance of voluntary agencies, non-governmental organisations, panchayati raj institutions and others; and promote participatory and sustainable management of degraded forest areas and adjoining lands.

National Afforestation Programme Scheme

National Afforestation Programme (NAP) is a major afforestation scheme of the NAEB in the Government of India. Launched in 2000-02, the scheme has acquired a pan-India ambit over the last nine years of its implementation and was being implemented by the states of the country through a twin institutional set-up of Forest Development Agencies (FDAs) at the forest division level and Joint Forest Management Committees (JFMCs) at the village level. From 201011, State Forest Development Agencies (SFDAs) were constituted at the state level to smoothen the fund flow to the FDAs. The programme is now implemented through a three-tier system of State Forests Development Agencies (SFDAs) at the state level, Forest Development Agencies (FDAs) at the district/forest division level and Joint Forest Management Committees (JFMCs) at the village level. Under Entry Point Activities, community assets are created with a 'care and share' concept. The objectives of the scheme include: protection and conservation of natural resources through active involvement of the people; checking land degradation, deforestation and loss of biodiversity; ecological restoration and environmental conservation and eco-development; evolving village level people's organisation which can manage the natural resources in and around villages in a sustainable manner; and capability endowment and skill enhancement for improving employability of the rural people.

Eco-Development Forces Scheme

Eco-Development Forces (EDF) Scheme was established in 1980s as a scheme being implemented through Ministry of Defence for ecological restoration of terrains, rendered difficult either due to severe degradation or remote location or difficult law and order situation. It is based on twin objectives of ecological regeneration in difficult areas, and promotion of meaningful employment to ex-servicemen.

Under this scheme, the establishment and operational expenditure on the Eco Task Force (ETF) Battalions raised by Ministry of Defence is reimbursed by Ministry of Environment, Forest and Climate Change while the inputs like sapling, fencing, etc., and also the professional and managerial guidance is provided by the state forest departments.

National Mission for Green India

The National Mission for a Green India (GIM), one of the eight missions under the National Action Plan on Climate Change aims at protecting and enhancing India's diminishing forest cover to counter the peri Is of climate change. It envisages a holistic view of greening and focuses on multiple ecosystem services along with carbon sequestration and emission reduction as co-benefit.

The Mission embarks on meeting the challenge of climate change adapation and mitigation through sub-missions and a cross-cutting intervention: (a) enhancing quality of forest cover and improving ecosystem services; (b) ecosystem restoration and increase in forest cover; c) agroforestry and social forestry; and d) promoting alternative fuel energy.

Declaring Eco-Sensitive Areas in Western Ghats

The Western Ghats is a global biodiversity hotspot and a treasure trove of biological diversity harbouring many endemic species of flowering plants, fishes, amphibians, reptiles, birds, mammals and invertebrates. It is also the origin of Godavari, Krishna, Cauvery and a number of other rivers of Peninsular India, upon which much of the economy of the region is dependent. Therefore, there is a need to conserve and protect the unique biodiversity of Western Ghats, while allowing for sustainable and inclusive development of the region. The concept of Ecologically Sensitive Area (ESA) provides a mechanism to conserve biological diversity of an area while allowing for sustainable development to take place.

National Natural Resources Management System

The scheme "National Natural Resources Management System" (NNRMS) of the Ministry is a part of an umbrella scheme of the erstwhile Planning Commission-Planning Committee-National Natural Resources Management System (PC-NNRMS) and is in operation since 1985. The prime objective of PC-NNRMS is utilisation of remote sensing technology for inventorisation, assessment and monitoring of country's natural resources.

Forestry Research

Indian Council of Forestry Research and Education

Indian Council of Forestry Research and Education (ICFRE), Dehradun an apex body in the national forestry research system, has been undertaking the holistic development of forestry research, education and extension covering all aspects of forestry. The Council deals with solution based forestry research in tune with the emerging issues in the sector, including global concerns such as climate change, conservation of biological diversity, combating desertification and sustainable management and development of resources. Major institutes engaged in forest research include: Forest Research Institute, Dehradun; Institute of Forest Genetics and Tree Breeding, Coimbatore; Institute of Wood Science and Technology, Bengaluru; Tropical Forest Research Institute, Jabalpur; Rain Forest Research Institute, Jorhat; Arid Forest Research Institute, Jodhpur; Himalayan Forest Research Institute, Shimla; Institute of Forest Productivity, Ranchi; and Institute of Forest Biodiversity, Hyderabad.

Indira Gandhi National Forest Academy

The Academy was constituted in 1987 by upgrading and renaming the erstwhile Indian Forest College, established in 1938. The Academy imparts professional training to the Indian Forest Services (IFS) Probationers and has been accorded the status of ”Staff College” for imparting mid-career training for officers of the Indian Forest Service (IFS). The mandate of the Academy is to impart training to IFS Probationers by way of knowledge and skills to the professional foresters and help them to develop competence for managing the country’s forest and wildlife resources on a sustainable basis, besides enabling them to act as catalysts for environmental protection, economic development and social change. Its capacity building programmes include training the new entrants to the service, in-service training (Mid Career training programme) to contemporary batches of IFS officers, and skills upgradation training to officers inducted into the IFS on promotion from the State Forest Service (SFS). The Academy also provides orientation courses to various other stakeholders like joint training for members of All India Services, Indian Revenue Services Probationers, members of higher judiciary etc.

Wildlife Institute of India

Wildlife Institute of India (Wll) was established in 1986 in Dehradun as an autonomous institute of the Ministry. The Institute has emerged as a premier training and research institution in the field of wildlife and protected area management in South Asia and South east Asia. Its primary mandates are to: (i) carry out scientific and applied research on various issues of wildlife and biodiversity conservation; (ii) develop wildlife and biodiversity conservation; (iii) develop wildlife science as a discipline through academic activities; (iv) build capacity in the field of wildlife management and conservation planning; and (v) provide technical inputs to MoEFCC and other international organisations. The Institute has been generating quality information and knowledge products in the field of wildlife science through research and mainstreaming it in capacity building programmes for various target groups and also provides advisory support to central and state governments.

Biodiversity Conservation and Rural Livelihood Improvement Project

Wildlife Institute of India (Wll) is one of the implementing partners in this project for enhancing capacities of the project implementers and as a knowledge management centre on landscape approach to biodiversity conservation.

National Green Corps Programme

National Green Corps (NGC) were formulated in 2001 -02. The phenomenal response that NGC received has made the network more than 1,00,000 Eco-clubs across the country in 15 years, making it one of the largest conservation networks. Under NGC programme, 86,765 Eco-clubs were supported.

National Environmental Awareness Campaign

The National Environmental Awareness Campaign (NEAC) was launched in mid-1986 with the objective of creating environmental awareness at the national level. In this campaign, nominal financial assistance is provided to NGOs, schools, colleges, universities, research institutes, women and youth organisations, army units, government departments, etc., from all over the country for conducting awareness

raising and action oriented activities. The theme for 2016-17 was ”Swachh Bharat Mission, Ganga Rejuvenation and River Cleaning”.

National Nature Camping Programme

National Nature Camping Programme is an initiative of the Ministry in environment education which is aimed at creating greater awareness, understanding and empathy in children with and for the environment. Through this initiative it is hoped that every child who goes through middle school (Classes VI-VIII) gets at least one opportunity for a 2-3 day camping experience during these years.

GLOBE

Global Learning and Observations to Benefit the Environment (GLOBE) is a hands-on international environmental science and education programme that brings students, teachers and scientists together to study the global environment. MoEFCC and US Government signed an agreement in 2000 to implement the Globe programme in India. Indian Environmental Society, Delhi, is an implementing agency for Globe in India.

Centre of Excellence

The scheme, Centre of Excellence was initiated in the Sixth Five Year Plan. The objective of the scheme is to provide selective support to the universities, reputed institutions including NGOs, professional organisations and other scientific and technological institutions to enable them to develop into advanced centres at the national level in that particular subject area to cater the need of the Ministry. At present there are seven Centres of Excellence functioning under this Ministry. These are Centre for Environment Education, Ahmedabad; CPR Environmental Education Centre, Chennai; Centre for Ecological Sciences, Indian Institute of Science, Bengaluru; Salim Ali Centre for Orhithology and History, Coimbatore; Centre for Environment Management of Degraded Ecosystems, Delhi; Madras School of Economics, Chennai; and Foundation for Revitalisation of Local Health Traditions, Bengaluru.

National Green Tribunal

The National Green Tribunal (NGT) was set up in 2010 under the NGT Act, 2010, for the purpose of effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

It is a specialised body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice. The Tribunal is mandated to make an endeavour for disposal of applications or appeals finally within 6 months of filing.

NGT has five places of sitting, i.e, the Principal Bench in Delhi and Zonal Benches in Pune, Kolkata, Bhopal and Chennai. Apart from this, the Tribunal holds three circuit Benches at Shimla, Shillong and Jodhpur.

Climate Change

The earth's climate has always changed and evolved. Some of these changes have been due to natural causes but others can be attributed to human activities such as deforestation, emissions from industry and transport, etc., which have led to accumulation of gases and aerosols in the atmosphere. These gases are known as Greenhouse Gases (GHGs) because they trap heat and raise air temperatures near the ground, acting like a greenhouse on the surface of the planet. In order to create and strengthen the scientific and analytical capacity for assessment of climate change in the country, different studies under Climate Change Action Programme (CCAP) were initiated. Many important bilateral and multilateral meetings and negotiations including Conference of Parties (CoP-22) were held.

National and State Action Plans on Climate Change

India's domestic strategy for addressing climate change is embedded in many of its social and economic development programmes. The National Action Plan on Climate Change (NAPCC) is being implemented through the nodal ministries in specific sectors/ areas. Eight national

missions in the area of solar energy, enchanced energy efficiency, sustainable agriculture, sustainable habitat, water, Himalayan eco-system, Green India and strategic knowledge for climate change form the core of NAPCC.

National Adaptation Fund for Climate Change

National Adaptation Fund for Climate Change (NAFCC) is a central sector scheme under implementation in the 12th Five Year Plan with National Bank for Agriculture and Rural Development (NABARD) as National Implementing Entity (NIE). The overall aim of the fund is to support concrete adaptation activities which are not covered under ongoing activities through the schemes of state and central government, that reduce the adverse impact of climate change facing communities, sectors and states.

Climate Change Action Programme

Ministry is implementing a scheme titled 'Climate Change Action Programme[1] since January 2014, with an objective to create and strengthen the scientific and analytical capacity for assessment of climate change in the country, putting in place appropriate institutional framework for scientific and policy initiatives and implementation of climate change related actions in the context of sustainable development. The NCAP is a major multi-institutional and multi-agency study. In this initiative, MoEFCC will collaborate with the Ministry of Earth Sciences, the Indian Space Research Organisation, the Ministry of Science and Technology and other associated agencies to enhance understanding of the role of black carbon in climate change through monitoring and assessment of the impacts of black carbon using modeling techniques.

Paris Agreement

India ratified the Paris Agreement to the UNFCCC in 2016. The action plan for implementation of Paris Agreement and its components is being developed.

Green Climate Fund

Green Climate Fund (GCF) is the operating entity of the financial mechanism of the UNFCCC. It aims to deliver a 50:50 balance between

mitigation and adaptation allocations in its portfolio. So far, three projects have been approved to India with a total cost of USD 177.8 million GCF funding. The total value of these three projects is 546.6 million USD to address both adaptation measures and mitigation action.

Ozone Cell

Ozone Layer Protection

Ozone, a tri-atomic molecule of oxygen is formed from oxygen naturally in the upper levels of the earth's atmosphere by high energy ultraviolet (UV) radiation from the sun. The UV radiation breaks down oxygen molecules, releasing free atoms, some of which bond with other oxygen molecule to form ozone. About 90 per cent of ozone formed in this way lies between 10 and 50 kilometers above the earth's surface, called the Stratosphere. The ozone found in the part of the atmosphere is called the ozone layer.

The ozone layer absorbs all the harmful UV-B radiations emanating from the sun. It protects plant and animal life from UV-B radiation. The UV-B radiation has the potential to cause skin cancer, eye cataract, suppress body's immune system, decrease crop yield etc., which led to the adoption of the Vienna Convention for the Protection of the Ozone Layer in 1985 and the Montreal Protocol on Substances that Deplete the Ozone Layer in 1987. The mandate of the Montreal Protocol is to phase out the production and consumption of the Ozone Depleting Substances (ODSs). India is a party to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer and its all amendments/adjustments. The MoEFCC has set up the Ozone Cell as a National Ozone Unit (NOU) to render necessary services for effective and timely implementation of the protocol and its ODs phase-out programme in India.

Vienna Convention

The Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer are the international treaties specific for the protection of the Stratospheric Ozone (Ozone layer). The Montreal Protocol has been recognised as the most successful international environmental treaty in history. It has been universally ratified and all the 197 UN member countries of the world are

the parties to the Vienna Convention and its Montreal Protocol. In the 29 years of operation of the Montreal Protocol, extraordinary international cooperation under this agreement has led to phase-out of production and consumption of several major ODSs such as CFCs, CTC and halons globally from 2010.

United Nations Convention to Combat Desertification

The concern for arresting and reversing land degradation and desertification gets reflected in many of the national policies [for e.g., National Water Policy 2012; National Forest Policy 1988; National Agricultural Policy 2000; Forest (Conservation) Act, 1980; Environment (Protection) Act, 1986, National Environmental Policy, 2006; National Policy for Farmers, 2007; National Rainfed Area Authority (NRAA)-2007] which have enabling provisions for addressing these problems. It is also implicit in the goals of Sustainable Forest Management (SFM), Sustainable Agriculture, Sustainable Land Management (SLM) and the overarching goal of sustainable development which the country has been pursuing. India became a signatory to the United Nations Convention to Combat Desertification (UNCCD) in 1994. MoEFCC is the nodal ministry in the Government of India for the UNCCD, and Desertification Cell is the nodal point within MoEFCC to coordinate all issues pertaining to the convention.

International Cooperation and Sustainable Development

International Cooperation and Sustainable Development (IC&SD) Division of the Ministry coordinates matters related to international environmental cooperation and sustainable development including Sustainable Development Goals (SDGs).

United Nations Environment Programme (UNEP)

India is a member of UNEP and provides annual financial contribution of USD 100,000 to UNEP Environment Fund. Three of the thirty-three members on UNEP's International Resource Panel (IRP) are currently from India. The Ministry is a member of the IRP Steering Committee. IRP supports UNEP's Resource Efficiency/Sustainable Consumption and Production (SCP) sub-programme and is carrying out assessments of the

world's most critical resource issues with a view to developing practical solutions for government policymakers, industry and society.

Global Environment Facility

India is a founding member of Global Environment Facility (GEF). Set up in 1991, GEF is the designated multilateral funding mechanism of 183 countries to provide incremental finance for addressing global environmental benefits which are also identified national priorities. The GEF mandate is decided as per the guidance provided by the Conference of Parties of the multilateral environmental conventions namely Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention to Combat Desertification (UNCCD), Stockholm Convention on PoPs and Minamata Convention on Mercury. The GEF grants are available under five focal areas, namely, biodiversity, climate change, land degradation, international waters and chemicals and waste.

13 Finance

THE Ministry of Finance is responsible for administration of finances of the government. It is concerned with all economic and financial matters affecting the country as a whole, including mobilisation of resources for development and other purposes. It regulates expenditure of the government including transfer of resources to the states. It is an important ministry within the government concerned with the economy of the country, serving as the Indian treasury department. In particular, it concerns itself with taxation, financial legislation, financial institutions, capital markets, centre and state finances, and the Union Budget. The Ministry is also the cadre controlling authority of the Indian Revenue Service, Indian Economic Service, Indian Cost Accounts Service and Indian Civil Accounts Service.

This Ministry consists of five departments, namely, (i) Economic Affairs; (ii) Expenditure; (iii) Revenue; (iv) Investment and Public Asset Management; and (v) Financial Services.

Website: www.finmin.nic.in

Department of Economic Affairs

The Department of Economic Affairs is the nodal agency of the government to formulate and monitor country's economic policies and programmes having a bearing on domestic and international aspects of economic management. A principal responsibility of this Department is the preparation and presentation of the Union Budget (including Railway Budget) to the Parliament and the Budget for the state governments under President's Rule and union territory administrations. Other functions include: formulation and monitoring of macroeconomic policies, including issues relating to fiscal policy and public finance; inflation, public debt management and the functioning of capital market including stock exchanges; production of bank notes and coins of various denominations, postal stationery, postal stamps; and cadre management, career planning and training of the Indian Economic Service.

The Department, inter alia, monitors current economic trends and advises the government on all matters having bearing on internal and external aspects of economic management including prices, credit, fiscal and monetary policy and investment regulations. All the external, financial and technical assistance received by India, except through specialised international organisations like FAO, ILO, UNIDO and except under international bilateral specific agreement in the field of science and technology, culture and education are also monitored by this Department.

Department of Economic Affairs (DEA) is divided into 14 functional divisions, namely: (i) Administration and Coordination Division; (ii) Aid, Accounts and Audit Division; (iii) Bilateral Cooperation Division; (iv) Budget Division; (v) Coin and Currency Division; (vi) Economic Division; (vii) Financial Market Division; (viii) Financial Sector Reforms and Legislation Division; (ix) Financial Stability Division; (x) Infrastructure Policy and Finance Division; (xi) International Economic Relations Division; (xii) Investment Division; (xiii) Multilateral Institutions Division; and (xiv) Statistical and Data Analysis and Monitoring Division. The Department of Economic Affairs is also responsible for preparation and presentation of the Union Budget to the Parliament and the Budget for the state governments under President's Rule and union territory administrations. The Directorate of Currency has the administrative control of the Security Printing and Minting Corporation of India Limited (SPMCIL), a wholly owned Government of India Corporation that manages Government of India mints, currency presses, security presses and security paper mill. In addition to formulating and executing policies and programmes relating to designs/security feature of bank notes and coins and issue of commemorative coins, the Directorate of Currency has also been mandated to conduct R&D activities in this area and indigenisation of all materials required for production of bank notes and others security products.

Website: www.dea.gov.in

Annual Financial Statement

Under Article 112 of the Constitution, a statement of estimated receipts and expenditure of the Government of India has to be laid before Parliament in respect of every financial year. This statement titled ”Annual Financial Statement” is the main Budget document. The Annual Financial Statement shows the receipts and payments of government under the three parts in which government accounts are kept: (i) Consolidated Fund, (ii) Contingency Fund and (iii) Public Account. All revenues received by government, loans raised by it, and also its receipts from recoveries of loans granted by it, form the Consolidated Fund. All expenditure of the government is incurred from the Consolidated Fund and no amount can be withdrawn from the Fund without authorisation from the Parliament. Occasions may arise when the government may have to meet urgent unforeseen expenditure pending authorisation from the Parliament. The Contingency Fund is an imprest placed at the disposal of the President to incur such expenditure. Parliamentary approval for such expenditure and for withdrawal of an equivalent amount from the Consolidated Fund is subsequently obtained and the amount spent from the Contingency Fund is subsequently recouped to the Fund. The corpus of the Fund authorised by the Parliament, at present, is ₹ 500 crore.

Besides the normal receipts and expenditure of the government which relate to the Consolidated Fund, certain other transactions enter government accounts, in respect of which the government acts more as a banker, for example, transactions relating to provident funds, small savings collections and other deposits, etc. The moneys thus received are kept in the Public Account and the connected disbursements are also made therefrom. Parliamentary authorisation for such payments from the Public Account is, therefore, not required. In a few cases, a part of the revenue of the government is set apart in separate funds for expenditure on specific objects like road development, primary education including mid-day meal scheme, etc. These amounts are withdrawn from the Consolidated Fund with the approval of Parliament and kept in the Public Account for expenditure on the specific objects. The actual expenditure proposed on the specific objects is also submitted for vote of Parliament.

Under the Constitution, Budget has to distinguish expenditure on revenue account from other expenditure. Government Budget, therefore, comprises (i) Revenue Budget; and (ii) Capital Budget.

Demands for Grants

The estimates of expenditure from the Consolidated Fund included in the Annual Financial Statement and required to be voted by the Lok Sabha are submitted in the form of Demands for Grants in pursuance of Article 113 of the Constitution. Generally, one Demand for Grant is presented in respect of each ministry or department. However, in respect of large ministries or departments more than one demand is presented. Each demand normally includes the total provisions required for a service, that is, provisions on account of revenue expenditure, capital expenditure, grants to state and union territory governments and also loans and advances relating to the service. In regard to union territories without legislature, a separate Demand is presented for each of the union territories.

Where the provision for a service is entirely for expenditure charged on the Consolidated Fund, for example, interest payments, a separate Appropriation, as distinct from a Demand, is presented for that expenditure and it is not required to be voted by Parliament. Where, however, expenditure on a service includes both 'voted' and 'charged' items of expenditure, the latter are also included in the Demand presented for that service but the 'voted' and 'charged' provisions are shown separately in that Demand. The Demands for Grants are presented to the Lok Sabha along with the Annual Financial Statement.

Finance Bill

At the time of presentation of the Annual Financial Statement before Parliament, a Finance Bill is also presented in fulfilment of the requirement of Article 110(1)(a) of the Constitution, detailing the imposition, abolition, remission, alteration or regulation of taxes proposed in the Budget. A Finance Bill is a Money Bill as defined in Article 110 of the Constitution. It is accompanied by a Memorandum explaining the provisions included in it.

Appropriation Bills

After the Demands for Grants are voted by the Lok Sabha, Parliament's approval to the withdrawal from the Consolidated Fund of the amounts so voted and of the amount required to meet the expenditure charged on the Consolidated Fund is sought through the Appropriation Bill. Under Article 114(3) of the Constitution, no amount can be

withdrawn from the Consolidated Fund without the enactment of such a law by Parliament.

Balance of Payments

Balance of Payments position to USD 433.7 billion in September 2019, from USD 412.9 billion of forex reserves in March 2019. This is on the back of Current Account Deficit (CAD) narrowing further to 1.5 per cent in 2019-20 from 2.1 per cent in 2018-19. Net FDI inflows remained buoyant attracting USD 24.4 billion in the first eight months of 2019-20, much higher than the corresponding period of 2018-19. Net overseas remittances in the first half of 2019-20 were more than 50 per cent of total receivables in 2018-19, standing at USD 38.4 billion. As per World Bank report of 2019, India's 17.5 million diaspora made it the top remittance-recipient country in 2018.

Sources of Revenue

In accordance with the Constitution (Eightieth Amendment) Act, 2000, which has been given retrospective effect from April 1, 1996, all taxes referred to in the Union List, except the duties and taxes referred to in Articles 268 and 269, respective surcharge on taxes and duties referred to in Article 271 and any cess levied for specific purpose under any law made by Parliament, shall be levied and collected by the Government of India and shall be distributed between the Union and the states in such a manner as may be prescribed by the President on the recommendations of the Finance Commission. For the period 2015-2020, the manner of distribution between the centre and the states has been prescribed in Presidential Orders issued after considering the recommendations of the Fourteenth Finance Commission. The main sources of Union Tax revenue are customs duties; union excise duties, service tax, corporate and income taxes; non-tax revenues largely comprising of interest receipts, dividends/profits, fines and miscellaneous receipts collected in the exercise of sovereign functions; regulatory charges; and license fees and user charges for publicly provided goods and services.

Public Debt and Other Liabilities

The Public Debt of India is classified into three categories of Union Government liabilities—internal debt, external debt and other liabilities.

Internal debt for Government of India largely consists of fixed tenure and fixed rate government papers (dated securities and treasury bills), which are issued through auctions. These include: market loans (dated securities); treasury bills (91, 182 and 364 days) and 14-day treasury bills (issued to state governments only); cash management bills; special securities issued to the Reserve Bank of India (RBI); compensation and other bonds; and non-negotiable and non-interest bearing rupee securities issued to international financial institutions and securities, issued under market stabilisation scheme with a view to reduce dependency on physical gold and reduce imports.

External debt represents loans received from foreign governments and multilateral institutions. The union government does not borrow directly from international capital markets. Its foreign currency borrowing takes place from multilateral agencies and bilateral sources, and is a part of official development assistance (ODA). At present, the Government of India does not borrow in the international capital markets.

”Other” liabilities, not a part of public debt, includes other interest bearing obligations of the government, such as post office saving deposits, deposits under small savings schemes, loans raised through post office cash certificates, provident funds and certain other deposits.

The Reserve Bank manages the public debt of the central and the state governments and also acts as a banker to them under the provisions of the Reserve Bank of India Act, 1934 (Section 20 and 21). It also undertakes similar functions for the state governments by agreement with the government of the respective state (under Section 21 A).

Social Sector Programmes

The flagship programmes continued to receive high priority, viz., Sarva Siksha Abhiyan; Mid-Day Meal Scheme; National Health Mission; Integrated Child Development Services; Swachh Bharat Abhiyan; Mahatma Gandhi National Rural Employment Guarantee Scheme; 100 Smart Cities, etc.

LTC Cash Voucher Scheme

Central government employees get Leave Travel Concession (LTC) in a block of 4 years in which air or rail fare, as per pay scale/entitlement, is reimbursed and, in addition, leave encashment of 10 days (pay + DA) is

paid. But due to Covid-19, employees were not in a position to avail of LTC in the current block of 2018-21. Therefore, the government decided to give cash payment in lieu of one LTC during 2018-21, which includes full payment on leave encashment and fare in 3 flat-rate slabs depending on class of entitlement; and this payment is to be tax-free. Any employee opting for it is required to buy goods/services worth 3 times the fare and 1 time the leave encashment before March 31, 2021.

Direct Benefit Transfer

Direct Benefit Transfer (DBT) is a major reform initiative launched by the Government of India in 2013 to provide an overarching vision and direction to enable direct cash transfer of benefits under various government schemes and programmes to individuals. Leveraging the gains in the Aadhaar Project, DBT was conceived with the objective of accurately targeting the intended beneficiaries and enhancing efficiency, transparency and accountability in delivery of benefits/ services under government schemes. The mandate of DBT was universalised and extended to cover all central sector schemes and centrally sponsored schemes that have any component of cash benefit transfer to individual beneficiaries. Further, the scope of DBT has been further expanded to include in-kind transfers to beneficiaries as well as transfers/ honorariums given to various enablers of government schemes like ASHA, Aanganwadi workers, etc., and not limited to cash transfers to beneficiaries only. DBT has shown promising results in schemes like Pahal (modified DBTL for LPG subsidy), cash subsidy for public distribution system (PDS) in Puducherry, Chandigarh, Dadra, Nagar Haveli and Daman and Diu, and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) across the country. The large scale implementation of DBT requires placing of new mechanisms, re-engineering of government processes and appropriate distribution of authority, responsibility and financial resources for delivery of public benefits/services.

Atmanirbhar Bharat

Atmanirbhar Bharat, which translates to ‘self-reliant India’ or ‘self-sufficient India’, is a policy for making India a bigger and more important part of the global economy, pursuing policies that are efficient, competitive and resilient. Not only should products be ‘made in India’,

but the promotion of those products should take place so as to make those products competitive. As part of the Atmanirbhar Bharat package, numerous government decisions were taken such as changing the definition of MSMEs, boosting scope for private participation in numerous sectors, increasing FDI in the defence sector, etc.

Pradhan Mantri Garib Kalyan Yojana

Pradhan Mantri Garib Kalyan Yojana (PMGKY) which was launched by the Government of India in 2016, was extended till November 30, 2020. It was a voluntary disclosure scheme to declare unaccounted for wealth and jewellery. The government stressed on the issue to divert the excess wealth of some to the welfare of the poor and the underprivileged. Social benefits under the PMGKY was extended to economically vulnerable households till March 2021 in view of the Covid-19 pandemic and related lockdowns. The additional support under the scheme is to be in cash and in-kind benefits. Under the scheme, 81 crore individuals are being provided with 5 kilos of rice or wheat and 1 kilo of *chana every* month. The fresh stimulus includes cash transfers to 20 crore Jan Dhan accounts. The beneficiaries of the scheme would include 3 crore poor senior citizens, poor widows, and other groups. Around 16 per cent of the EPFO subscribers are likely to be covered under the scheme. Farmers were provided an additional amount of ₹ 2,000 as front-load under the Kisan Samman Nidhi programme. The daily wage of workers under Mahatma Gandhi National Rural Employment Guarantee Act was also increased.

It was implemented by the Department of Revenue under the Ministry of Finance and was continuously monitored by central and state governments. To provide relief to the business, additional working capital finance of 20 per cent of the outstanding credit as in February 2020, in the form of term loan at a concessional rate of interest was announced. Provision was made for ₹ 20,000 crore subordinate debt for 2 lakh Micro, Small and Medium Enterprises (MSMEs) which are non performing assets (NPA) or are stressed. Government also set up a Fund of Funds with a corpus of ₹ 10,000 crore to provide equity funding support for MSMEs.

Schemes for the Development of Scheduled Castes and Scheduled Tribes

From 2005-06, a separate statement on the schemes for the welfare of Scheduled Castes (SCs) and Scheduled Tribes (STs) was introduced in the Budget document. From the financial year 2011-12, this statement is focused only on Plan schemes under 'Scheduled Castes Sub Plan' and 'Tribal Sub Plan' exclusively for scheduled castes and scheduled tribes welfare schemes respectively. It shows year-wise Budget Estimates and Revised Estimates of current year and Budget Estimates of the next financial year.

Public Debt

Public debt includes: (a) internal debt comprising borrowings inside the country like market loans, compensations and other bonds, treasury bills issued to finance state governments, commercial banks and other parties as well as non-negotiable non-interest bearing rupee securities issued to the international financial institutions; and (b) external debt comprising loans from foreign countries, international financial institutions, etc. The "other liabilities" include outstanding against the various small saving schemes, provident funds, securities issued to the oil marketing companies, fertilizer companies and Food Corporation of India, reserve funds and deposits and other items.

Green Climate Fund

The Green Climate Fund (GCF) is a multilateral fund created to support the efforts of developing countries to respond to the challenge of climate change. GCF launched its initial resource mobilisation in 2014, and mobilised resources worth USD 10.3 billion. So far, 43 projects have been approved by the Board of the GCF. India also has one project approved by the Board with NABARD on "Ground water recharge and Solar Micro Irrigation to ensure food security and enhance resilience in vulnerable tribal areas of Odisha" from 16th GCF Board meeting. The project is approved with an outlay of USD 166.29 million including GCF grant support of USD 34.357 million whereas other financial resources would be provided by the Government of Odisha and World Bank.

Economic Growth

As per the First Advance Estimates of National Income released by the National Statistical Office (NSO), the growth rate of the Gross Domestic Product (GDP) at constant market prices was estimated to be 5.0 per cent in 20L9-2020. The growth of Gross Value Added (GVA) at

constant basic prices was estimated to be 4.9 per cent in 2019-20, with agriculture and allied sectors, industrial sector and services sector growing at 2.8 per cent, 2.5 per cent and 6.9 per cent respectively. On the demand side, the growth in government final consumption expenditure at constant (2011-12) prices remained strong at 10.5 per cent in 2019-20. The First Revised Estimates of National Income released in January 2020, estimated the growth of real GDP at 6.1 per cent in 2018-19, as compared to 7.0 per cent in 201 7-18. Gross saving as percentage of GDP at current market prices was at 30.1 per cent in 2018-19, as compared to 32.4 per cent in 2017-18. Investment rate as measured by share of gross capital formation to GDP, was at 32.2 per cent in 2018-19, as compared to 34.2 per cent in 201 7-18.

Prices

Consumer Price Index (Combined) (CPI-C) inflation (Base 2012=100) for 2018-19 declined to 3.4 per cent from 3.6 per cent in 2017-18, 4.5 per cent in 2016-17, 4.9 per cent in 2015-16 and 5.9 per cent in 2014-15. It averaged 4.5 per cent in 2019-20 (April to January) and stood at 7.6 per cent in January 2020. Food inflation based on Consumer Food Price Index (CFPI) for 2018-19 declined to 0.1 per cent from 1.8 per cent in 2017-18, 4.2 per cent in 2016-17, 4.9 per cent in 2015-16 and 6.4 per cent in 2014-15. It averaged 6.1 per cent in 201920 (April to January) and stood at 13.6 per cent in January 2020. Inflation measured in terms of Wholesale Price Index (WPI) stood at 4.3 per cent in 2018-19 as compared to 3.0 per cent in 2017-18,1.7 per cent in 2016-1 7, (-)3.7 per cent in 2015-16 and 1.2 per cent in 2014-15. It averaged 1.7 per cent in 2019-20 (April to January) and stood at 3.1 per cent in January 2020.

Foreign Exchange Reserves

The level of foreign exchange reserves particularly foreign currency assets is largely the outcome of Reserve Bank of India's intervention in the foreign exchange market to stabilise the rupee value. India's foreign exchange reserves stood at USD 461.2 billion in January 2020. The current position is at a comfortable level to cushion the exchange rate volatility from any international macro-economic uncertainty.

Exchange Rate of Rupee

In 2018-19 (April-March), the average monthly exchange rate of rupee (RBI's reference rate) was ₹ 65.64 per US dollar in April 2018 and

₹ 69.48 per US dollar in March 2019. On year-on-year basis, the rupee depreciated by 7.8 per cent from ₹ 64.46 per US dollar in 201 7-18 to ₹ 69.93 per US dollar in 2018-19. In the month of March 2019, rupee appreciated against US dollar.

External Debt

India's external debt stock stood at USD 543.02 billion at end-March 2019 recording an increase of USD 13.7 billion over the level at end-March 2018. The maturity profile of India's external debt indicates dominance of long-term borrowings. At end-March 2019, long-term external debt was USD 434.6 billion, witnessing an increase of 1.7 per cent over the end-March 2018 level of USD 427.1 billion. Long-term external debt accounted for 80.0 per cent of total external debt at end-March 2019 *vis-a-vis* 80.7 per cent at end-March 2018.

Climate Change

The 24th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 24) was held in Katowice, Poland. The most important outcome of the Conference was finalisation of Paris Agreement Work Programme—guidelines/modalities/ rules for implementation of Paris Agreement. The Paris Agreement pertains to the post-2020 period. Under it, the developed countries have obligations to provide financial support to developing countries. The developed countries had made a commitment to a goal of mobilising USD 100 billion annually by 2020 for supporting climate action in developing countries. The issues relating to climate finance, in particular, guidance on finance provisions was operationalised under Articles 9.5 and 9.7 of the Paris Agreement.

Banking Sector

The performance of the banking sector (domestic operations), Public Sector Banks (PSBs) in particular, improved in 2018-19. The Gross Non-Performing Advances (GNPA) ratio of Scheduled Commercial Banks decreased from 11.2 per cent in March, 2018 to 9.3 per cent in March, 2019 and their Restructured Standard Advances (RSA) ratio decreased to 0.4 per cent in March, 2019 from 0.9 per cent in March, 2018.

Credit Growth

Non-Food Credit (NFC) growth, on a year-on-year (y-o-y) basis, moderated to 7.0 per cent in December, 2019 from 11.9 per cent in April, 2019. This moderation was witnessed across all the major segments of non-food credit, except personal loans, which continued to grow at a steady and robust pace during 2019. The moderation was led by a sharp deceleration in credit growth to the services sector. Credit growth to industry also witnessed a significant slowdown in the recent months. In December 2019, on year-on-year (y-o-y) basis, non-food bank credit growth decelerated to 7.0 per cent from 12.8 per cent in December 2018. While credit growth to 'agriculture and allied activities' and 'industries' decelerated to 5.3 per cent and 1.6 per cent, respectively, in December 2019, from 8.4 per cent to 4.4 per cent, respectively, in December 2018. Credit growth to services sector decelerated sharply to 6.2 per cent.

Changes in Banking Regulations

In order to enhance the credit discipline among larger borrowers, the guidelines on loan system for delivery of bank credit were issued on December 5, 2018. Accordingly, in respect of borrowers having aggregate fund based working capital limit of 1,500 million and above from the banking system, a minimum level of 'loan component' of 40 per cent of sanctioned limit was effective from 2019.

One-time Restructuring of Loans to MSMEs

The scheme was made available to MSMEs qualifying certain objective criteria including inter alia a cap of ₹ 250 million on the aggregate exposure of banks and NBFCs to an MSME as on January 1, 2019. The restructuring is to be implemented by March 31, 2020 and an additional provision of 5 per cent to be maintained in respect of accounts restructured under this scheme.

Insolvency and Bankruptcy Code

A Bankruptcy Law Reforms Committee was set up in 2014 for providing an entrepreneur friendly legal bankruptcy framework for meeting global standards for improving the ease of doing business with necessary judicial capacity. Accordingly, the Insolvency and Bankruptcy Code (IBC), 2016, became operational in 2016. The Code aims to promote entrepreneurship, availability of credit, and balance the interests of all the stakeholders by consolidating and amending the laws relating to reorganisation and insolvency resolution of corporate persons,

partnership firms and individuals in a time-bound manner along with maximisation of value of the assets of such persons and matters connected therewith or incidental thereto. It proposes a framework to ensure: early detection of stress in a business; initiation of the insolvency resolution process by debtor, financial creditor or operational creditor; liquidation of unviable businesses; and avoiding destruction of value of failed business. The Ministry of Corporate Affairs is taking further necessary steps for implementation of the Code.

Financial Stability and Development Council

With a view to strengthening and institutionalising the mechanism for maintaining financial stability, enhancing inter-regulatory coordination and promoting financial sector development, the Financial Stability and Development Council (FSDC) was set up as the apex level forum in 2010. The Council, *interalia,* monitors macro prudential supervision of the economy including functioning of large financial conglomerates, and addresses inter-regulatory coordination and financial sector development issues, including issues relating to financial literacy and financial inclusion.

Financial Stability Board

Financial Stability Board (FSB) was established in 2009 under the aegis of G20 by bringing together the national authorities, standard setting bodies and international financial institutions for addressing vulnerabilities and developing and implementing strong regulatory, supervisory and other policies in the interest of financial stability. India is an active member of the FSB having three seats in its Plenary.

Infrastructure Financing

Given the enormity of the investment requirements and the limited availability of public resources for investment in physical infrastructure, it is imperative to explore avenues for increasing investment in infrastructure through various sources. In view of this, the government launched the following to mobilise the long-term investment on infrastructure in the country:

(i) Bank Financing: Banks continue to be the major source of financing infrastructure. RBI has been modifying guidelines for advances to infrastructure including 5/25 scheme, take out financing.

(ii) Institutional Finance: The government has also set up India Infrastructure Finance Company Limited (IIFCL) with the specific mandate to play a catalytic role in the infrastructure sector by providing long-term debt for financing infrastructure projects. IIFCL funds viable infrastructure projects through long-term debt, refinance to banks and financial institutions for loans granted by them, with tenure exceeding 10 years or any other mode approved by the government.

(iii) Infrastructure Debt Funds (IDFs): Government of India has conceptualised Infrastructure Debt Funds (IDFs) to accelerate and enhance the flow of long-term debt into infrastructure projects to help in the migration of project loans for operating assets from banks to the fixed income markets.

(iv) Real Estate Investment Trusts (REITs)/lnfrastructure Investment Trusts (InvlTs): These are trust-based structures that maximise returns through efficient tax pass-through and improved governance structures. Guidelines/Regulations for InvlTs and REIT were notified by SEBI in 2014.

Public Private Partnerships

Availability of quality infrastructure is a pre-requisite to achieve broad-based and inclusive growth on a sustained basis. Infrastructure is also critical for enhancing productivity and export competitiveness. Given the enormity of the investment requirements and the limited availability of public resources for investment in physical infrastructure, the projected infrastructure investments made it imperative to explore avenues for increasing investments in infrastructure through a combination of public investment and Public Private Partnerships (PPPs). PPPs bridge the deficit in financing of infrastructure projects, and also bring in cost effective new technology for operation and maintenance of created asset, thus, extracting long term value for proposition. India systematically rolled out a PPP programme for the delivery of high-priority public utilities and infrastructure and, over the last decade or so, developed what is perhaps one of the largest programme in the world.

Information Dissemination

DEA maintains a website dedicated to PPPs, www.pppinindia.gov.in, to provide information related to PPP initiatives in the country. The website serves as a hub of information on PPP initiatives and contains

related policy documents, government guidelines issued for mainstreaming PPPs. These include information on the institutional mechanisms for speedy appraisal of PPP infrastructure projects and the schemes for financial support to PPP projects. The website also contains various knowledge products developed in the PPP cell, sharing PPP best practices to enhance the ability of the public officials as well as private developers to implement PPP projects, www.infrastructureindia.gov.in is a database of infrastructure projects including PPPs being implemented across the sectors in India. It provides key information on the status of infrastructure projects being executed by the government as well as the private sector.

G -20

The G20 was formed in 1999, as a forum of Finance Ministers and Central Bank Governors, in recognition of the fact that there was a major shift in the global economic weight from the advanced economies to emerging market economies (EMEs). The gradually declining role of G8 as world's economic coordinator and the increasing clout of EMEs in global deliberations on economic governance resulted in G-20 replacing G-8 in 1999. However, G20 rose into true prominence in 2008 when it was elevated from a forum of Finance Ministers and Central Bank Governors to that of the G20 Heads of Nations in order to effectively respond to the global financial crisis of 2007-2010.

BRICS

The BRICS nations or Brazil, Russia, India, China and South Africa form the five key pillars of south-south cooperation and are the representative voice of emerging markets and developing countries in the global forums such as the G20. The New Development Bank, established by these nations in 2015, marked its first imprints in India by signing a loan agreement for financing of the major district road project in Madhya Pradesh in March 2017. India is working closely with the Bank's management team to develop a robust pipeline of projects cutting across areas such as Smart Cities, renewable energy, urban transport, clean coal technology, solid waste management and urban water supply. The framework of swap lines, conceived as a BRICS Contingent Reserve

Arrangement (CRA) with a corpus of USD 100 billion, stands operationalised in case any member nation requires short-term liquidity support.

United Nations Development Programme

The United Nations Development Programme (UNDP) is the largest channel for development cooperation in the UN . The overall mission of the UNDP is to assist the programme countries through capacity development in Sustainable Human Development (SHD) with priority on poverty alleviation, gender equity, women empowerment and environmental protection. All assistance provided by the UNDP is grant assistance. The UNDP derives its funds from voluntary contributions from various donor countries. India's annual contribution to the UNDP has been to the extent of USD 4.5 million, which is one of the largest from developing countries. Over and above its annual contribution, India also pays partly for the expenditure of the local office. The country-specific allocation of UNDP resources is made every five years under the Country Cooperation Framework (CCF) which usually synchronises with India's five year plans.

Website: www.undp.org

South Asian Association for Regional Cooperation

The South Asian Association for Regional Cooperation (SAARC), in existence since 1985 (founded in Dhaka), is a regional organisation that aims to promote economic, social, cultural, technical and scientific cooperation in South Asia. Its member states include Afghanistan, Bangladesh, Bhutan, India, Nepal, Maldives, Pakistan and Sri Lanka. Its secretariat is based in Kathmandu, Nepal. It has crafted several regional conventions, agreements and institutions for dealing with issues that affect the citizens of the region. It is a consensus-based forum for the exchange of ideas, development of regional programmes and projects. The Framework for Currency Swap Arrangement for the SAARC countries was formulated with the intention to provide a line of funding for short term foreign exchange requirements or to meet balance of payments crises till longer term arrangements are made or the issue is resolved in the short-term itself. Under the facility, RBI offers swaps of

varying sizes to each SAARC member country (Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka) depending on their two months import requirement and not exceeding USD 2 billion in total, in USD, Euro or INR So far, the facility has been availed by Bhutan, Sri Lanka and Maldives.

Website: www.saarc-sec.org

SAARC Development Fund (SDF)

SDF was established in 2008 by the SAARC countries to improve the livelihood of the people and to accelerate economic growth, social progress and poverty alleviation in the region. The Fund is implementing many SAARC projects and programmes. Project funding in SDF is to be taken up under three windows (Social, Economic and Infrastructure). Of the three windows of SDF, economic and infrastructure windows are being operationalised.

Bilateral Cooperation

Department of Economic Affairs also deals with Bilateral Development Assistance from G-8 countries, namely USA, UK, Japan, Germany, Italy, Canada and Russian Federation as well as the European Union. The Division also deals with the work relating to extension of Lines of Credit to developing countries. It is also the focal point for administering short term foreign training courses of the duration up to four weeks offered by various international agencies/ countries.

Bilateral Official Development Assistance

India has been accepting external assistance from bilateral partners in the form of loans, grants and technical assistance for development of infrastructure, social sector and for enhancement of knowledge/skills of Indian nationals at both Centre and state level. In terms of the guidelines issued in 2005, bilateral development assistance can be accepted from all G-8 countries, namely USA, UK, Japan, Germany, France, Italy, Canada and the Russian Federation as well as from European Commission. European Union Countries outside the G-8 can also provide bilateral development assistance to India provided they commit a minimum annual development assistance of USD 25 million.

International Monetary Fund

India is a founder member of the International Monetary Fund (IMF), which was established to promote a cooperative and stable global monetary framework. At present, 188 nations are members of the IMF. Since the IMF was established, its purposes have remained unchanged but its operations - which involve surveillance, financial assistance and technical assistance - have developed to meet the changing needs of its member countries in an evolving world economy. The Board of Governors of the IMF consists of one Governor and one Alternate Governor from each member country. For India, the Finance Minister is the ex-officio Governor on the Board of Governors of the IMF. There are three other countries in India's constituency at the IMF, viz., Bangladesh, Bhutan and Sri Lanka. Governor, Reserve Bank of India (RBI) is India's Alternate Governor.

Website: www.imf.org

World Bank

India has been borrowing from the World Bank through International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) for various development projects in the areas of poverty reduction, infrastructure, rural development, etc. IDA funds were one of the most concessional external loans for Government of India and were used largely in social sector projects that contribute to the achievement of millennium development goals.

Website: www.worldbank.org

International Finance Corporation

International Finance Corporation (IFC), a member of the World Bank Group, focuses exclusively on investing in the private sector in developing countries. Established in 1956, IFC has 184 members. India is the founding member of IFC. It is an important development partner for India with its operations of financing and advising the private sector in the country. India represents IFC's largest portfolio exposure globally. The IFC's investments in India are spread across important sectors like infrastructure, manufacturing, financial markets, agribusiness, SMEs and renewable energy. Keeping in alignment with the Country Partnership

Strategy (CPS) of the World Bank Group in India, IFC focuses on low-income states in India.

New Development Bank

The New Development Bank (NDB) has been instituted with a vision to support and foster infrastructure and sustainable development initiatives in emerging economies. The founding members of the NDB - Brazil, Russia, India, China and South Africa (BRICS) - brought in capital of USD 1 billion as initial contribution.

Website: www.ndb.int

Asian Infrastructure Investment Bank

Asian Infrastructure Investment Bank (AIIB) is a Multilateral Development Bank (MDB) set up in 2016 to foster sustainable economic development, create productive assets and improve infrastructure in Asia through financing of infrastructure projects. India is one of the founding members and the second largest shareholder. India along with 20 other countries signed the Inter-Governmental Memorandum of Understanding (MoU) for establishing the AIIB in Beijing.

Website: www.aiib.org

International Fund for Agricultural Development

International Fund for Agricultural Development (IFAD) was set up in 1977 as the 13th specialised agency of the UN. It is dedicated to eradicating poverty and hunger in rural areas of developing countries.

Global Environment Facility

The Global Environment Facility (GEF) operates as a mechanism for international cooperation for the purpose of providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits. GEF provides grants to eligible countries in its focal areas: biodiversity, climate change, land degradation, international waters, chemicals and waste. It also serves as financial mechanism for the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate

Change (UNFCCC), Stockholm Convention on Persistent Organic Pollutants (POPs), UN Convention to Combat Desertification (UNCCD), Minamata Convention on Mercury and supports implementation of the Protocol in countries with economices in transition for the Montreal Protocol on Substances that Deplete the Ozone Layer (MP).

Asian Development Bank

India is a founding member of the Asian Development Bank (ADB) which was established in 1966. ADB has 67 members (including 48 regional and 19 non-regional members), with its headquarters at Manila, Philippines. India is holding 6.331 per cent of shares, totaling 6,72,030 shares in ADB as on December 31, 2016, with 5.363 per cent voting rights. The Bank is engaged in promoting economic and social progress of its developing member countries (DMCs) in the Asia Pacific Region. The main instruments that it uses to do this are: making loans and equity investments, providing technical assistance for the preparation and execution of development projects and programmes, and other advisory services, guarantees, grants and policy dialogues. India borrows from ADB within overall external debt management policy pursued by the government, which focuses on raising funds on concessional terms from less expensive sources with longer maturities. India started borrowing from ADB in 1986.

Website: www.adb.org

Currency and Coinage

Security Printing and Minting Corporation of India Limited

Security Printing and Minting Corporation of India Ltd. (SPMCIL) is the only PSU under the Department of Economic Affairs. It was formed after corporatisation of nine units, i.e., four mints, four presses (two currency note presses and two security presses) and one paper mill which were earlier functioning under the Ministry. It was incorporated in 2006 under the Companies Act, 1956. It is engaged in the manufacturing of security paper, minting of coins, printing of currency and bank notes, non-judicial stamp papers, postage stamps, travel documents, etc. The Company supplies currency/bank notes and coins to RBI, non-judicial stamp papers to various state governments; postal stationery and stamps

to postal department; passports, visa stickers and other travel documents to Ministry of External Affairs. Other products include commemorative coins, MICR and Non-MICR cheques etc. SPMCIL has also set up a 50:50 Joint Venture in 2010 with Bhartiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL) in the name of Bank Note Paper Mill India Private Limited (BNPMIPL), a Green-Field project of Bank Note Paper Mill with capacity of 12,000 MT per annum having two state of the art technology paper lines of 6,000 MT capacity per annum each. The commercial production has started from both the lines.

Website: www.spmcil.com

National Investment and Infrastructure Fund

The Government of India has put investment in infrastructure as one of the core elements of its economic programme. India's average investment in infrastructure was 4.7 per cent of GDP during 1992-2010. Moreover, there has been a slowdown in equity inflows into the infrastructure sectors over the past few years, constraining further investment. National Investment and Infrastructure Fund (NIIF) was created with the aim to attract equity investments from both domestic and international sources for infrastructure development in commercially viable projects, both greenfield and brownfield, including stalled projects.

Website: www.niifindia.in

International Investment Treaties and Framework

India initiated the exercise to negotiate and enter into Bilateral Investment Treaties (BITs)/ Bilateral Investment Promotion and Protection Agreements (BIPAs) with other countries as a part of the comprehensive economic reforms programme which was initiated in 1991. A BIT is essentially an international treaty which increases the comfort level and boosts the confidence of the investors by assuring a minimum standard of treatment and non-discrimination in all matters while providing for an independent forum for dispute settlement through arbitration. In turn, BITs are expected to project India as an attractive foreign direct investment (FDI) destination as well as protect outbound Indian FDI abroad.

Due to considerable socio-economic changes which have taken place since 1993, it was felt that there was a need for closer examination of the entire gamut of issues associated with BITs and also investment chapter of CECAs/CEPAs/Free Trade Agreements (FTAs). The new Indian Model BIT of 2015 aims to provide appropriate protection to foreign investors in India and Indian investors in the foreign country, in the light of relevant international precedents and practices.

Department of Expenditure

The Department of Expenditure is the nodal department for overseeing the public financial management system in the central government and matters connected with state finances. It is responsible for the implementation of the recommendations of the Finance Commission and Central Pay Commission, monitoring of audit comments/observations and preparation of central government accounts. It further assists central ministries/departments in controlling the costs and prices of public services, reviewing system and procedure to optimise outputs and outcomes of public expenditure. The principal activities of the Department include overseeing the expenditure management in the central ministries/ departments through the interface of the Financial Rules/ regulations/ orders, pre-sanction appraisal of major schemes/ projects, handling bulk of the central budgetary resources transferred to state.

The Personnel and Establishment Division is responsible for administration of various financial rules and regulations like General Financial Rules (GFRs), Delegation of Financial Power Rules (DFPRs), etc., including those relating to personnel matters of central government employees such as regulation of pay and allowances, policy matters on pension, and staffing of government establishments by creation and upgradation of posts, as also cadre reviews.

Website: www.doe.gov.in

Controller General of Accounts

The Controller General of Accounts (CG A), inthe Department of Expenditure, is the Principal Accounting Adviser to Government of India and is responsible for establishing and maintaining a technically sound

Management Accounting System. The Office of CGA prepares monthly and annual analysis of expenditure, revenues, borrowings and various fiscal indicators for the Union Government. Under Article 150 of the Constitution, the Annual Appropriation Accounts (Civil) and Union Finance Accounts are submitted to Parliament on the advice of Comptroller and Auditor General of India. Along with these documents, an M.I.S. Report titled 'Accounts at a Glance[1] is prepared and circulated in Parliament. It further formulates policies relating to general principles, form and procedure of accounting for the central and state governments. It administers the process of payments, receipts and accounting in central civil ministries/departments; and prepares, consolidates and submits the monthly and annual accounts of the central government through a robust financial reporting system aimed at effective implementation of the government fiscal policies. Through its internal audit units in the respective ministries/departments, it is responsible for maintaining the requisite technical standards of accounting in the departmentalised accounting offices and for monitoring of financial performance and effectiveness of various programmes, schemes and activities of the civil ministries.

Website : www.cga.nic.in

Public Financial Management System

The Public Financial Management System (PFMS) is a web-based online software application designed, developed, owned and implemented by the CGA with the aim to provide a sound public financial management system by establishing a comprehensive payment, receipt and accounting network. It has been aimed to achieve (i) "Just in Time"transfer of funds and (ii) complete tracking of realisation of funds from its release to its credit into the bank account of intended beneficiaries. PFMS makes a direct and significant contribution to the Digital India initiative by enabling electronic payment and receipts for ministries/ departments in the Government of India. Integration with financial IT systems of various state governments is one key objective of PFMS, which will facilitate complete tracking of funds transferred for scheme implementation and provide more holistic view of finances available for welfare programmes. To achieve these objectives, the Treasury Systems of all the states, all the major banks of India and

various external MIS Systems have been integrated with PFMS. All the schemes of GoI and their implementing agencies have been registered on PFMS. It is playing a vital role in making Direct Benefit Transfer (DBT) to weaker section of the society.

Non-Tax Receipt Portal

The objective of the Non-Tax Receipt Portal (NTRP), is to provide a one-stop window to citizens/corporates/institutions/other users for making online deposits of Non-Tax Receipts (NTR) which are payable to the Government of India. This was inaugurated in 2016. The NTRP portal provides an end-to-end solution for the complete value chain of non-tax receipts, including online user interface, payment at the payment gateway aggregator, and accounting of the receipts by the government department/ministry. NTRP uses the modality of Payment Gateway Aggregator (PGA). It uses the back-end system of the robust Public Financial Management System where all data is housed and MIS reports are available on the PFMS portal for both accounting and monitoring purposes.

Institute of Government Accounts & Finance

The Institute of Government Accounts & Finance (INGAF) is the training arm of the Controller General of Accounts. It was set up in February 1992, to train personnel in specific areas of accounting, administrative matters and financial management. In the years following its inception, the Institute has evolved to become an elite training centre in government accounting and public financial management. In addition, the Institute has regional training centres at Chennai, Kolkata, Aizawl and Mumbai.

Central Pension Accounting Office

The Central Pension Accounting Office (CPAO) was established in 1990 for Payment and Accounting of Central (Civil) Pensioners and pension to freedom fighters etc. CPAO is a subordinate office under the Office of the Controller General of Accounts, Ministry of Finance. It has been entrusted with the responsibility of administering the scheme of payment of pension to central government (Civil) pensioners through authorised banks. Its core functions are: issue of Special Seal Authorities (SSAs) authorising payment of pension in fresh as well as revision of pension cases to the CPPCs (central pension processing centres) of

pension disbursing banks; preparation of Budget for the pension grant and accounting thereof; maintenance of data bank of central civil pensioners containing all details indicated in the PPOs and Revision Authorities; and handle the grievances of central civil pensioners.

(a) e-Revision utility for the 7th CPC Pension Revisions: CPAO has developed e-Revision utility with the facility of sending online digitally signed revision authorities for the revision of 7th CPC pension cases by the PAOs to CPAO. This utility is being used by more than 600 Pay & Accounts Offices of the central civil ministries/departments. CPAO is also issuing digitally signed electronic-Special Seal Authority (e-SSA) to all the 39 CPPCs (Central Pension Processing Centres) of the 24 authority banks for pensions. This service has reduced the paper movement from PAOs to CPAO and from CPAO to banks.

(b) Online Allotment of Pension Payment Orders (PPOs) Number: From 2016, Central Pension Accounting Office (CPAO) has started facility on online allotment of PPO number on CPAO website for Pay & Accounts Offices to avoid paper based allottment of PPO numbers. This has resulted in less paperwork and the process has been faster than earlier. It has also resulted in saving time and postage cost.

(c) Electronic-Pension Payment Order (e-PPO) Project. Paperless movement of digitally signed e-Special Seal Authority (e-SSA) from Central Pension Accounting Office (CPAO) to 39 Central Pension Processing Centres (CPPCs) of 24 authorised banks for pension is in operation and all the CPPCs are getting digitally signed Special Seal Authority (SSA) in fresh as well as the revision pension cases directly into their SFTP servers.

(d) Web Reponsive Pensioners' Service (WRPS): Digital India campaign of Government of India emphasises that the government services should be made available to the citizens electronically by improving online infrastructure and by increasing internet connectivity or by making the country digitally empowered. Digital India consists of three core components: development of secure and stable digital infrastructure; delivering government services digitally; and universal digital literacy.

(e) Social Media Presence of CPAO: Official social media accounts of Central Pension Accounting Office on platforms Facebook, Twitter and YouTube have been created to provide better services to the

pensioners/family pensioners and to lodge their grievances. This is over and above the latest modes available to the pensioner to contact and communicate with CPAO. Various instructive videos have been made for the better use of the WRPS facility, e-Revision Utility for pensioners and other stakeholders.

(f) Pension Authorisation Retrieval and Accounting System (PARAS): All the pension processing activities from receipt to dispatch are managed through PARAS. The web interface of PARAS provides the related information to pensioners; PAOs/ministries and banks. About 13 lakh central civil pension cases have been processed by CPAO through this software thereby creating digital database of these pensioners. Various MIS reports are also generated by this software for the monitoring purposes.

(g) Other Salient Web Facilities: Other facilities for retired and retiring personnel include: digital record of pension and revised orders; download facility of pension; pension processing status tracking; grievance redressal; links to Jeevan Pramaan, Bhavishya and other related portals, etc.

Website: www.cpao.nic.in

National Institute of Financial Management

The National Institute of Financial Management (NIFM) was set up in 1993 as an autonomous body to impart training to officers recruited by the Union Public Service Commission through the annual Civil Services Examination and allocated to the various services responsible for managing senior and top management posts dealing with accounts and finance in the Government of India and to develop as a Centre of Excellence in the areas of financial management and related disciplines, not only in India but also in Asia. The Institute adheres to norms prescribed by the All India Council for Technical Education (AICTE) in respect of faculty qualifications and strength. Currently, the Institute runs five long-term programmes approved by AICTE—Professional Training Course including one year course for newly recruited probationers of Accounting services called diploma in public financial management; a one year diploma course in government financial management; a two-year postgraduate diploma in management (Financial Management) programme for officers of the central government, the state governments,

public sector undertakings and other organisations and a one-year postgraduate diploma in management (financial markets) to produce competent researchers, teachers and consultants.

Website : www.nifm.ac.in

Revision of General Financial Rules

The General Financial Rules (GFRs) are rules and orders dealing with matters involving public finances. General Financial Rules were issued for the first time in 1947 bringing together in one place all existing orders and instructions pertaining to financial matters. These have subsequently been modified and issued as GFRs 1963 and GFRs 2005. The Revised General Financial Rules-2017 were released in 201 7 to enable an improved, efficient and effective framework of fiscal management while providing the necessary flexibility to facilitate timely delivery of services. In the last few years, the government has made many innovative changes in the way it conducts its business. Reforms in government budgeting like removal of distinction in non-plan and plan expenditure, merger of Railway Budget with General Budget, focusing on outcomes through an improved Outcome Budget document, all needed to be reflected in the GFRs. Increased focus on Public Finance Management System (PFMS), reliance on the Direct Benefit Transfer (DBT) Scheme to ensure efficient delivery of entitlements, introduction of new e-sites like Central Public Procurement Portal, Government e-Marketing (GeM) Portal and Non-Tax Revenue Portal have also necessitated revision of the existing GFRs to keep them in tune with the changing business environment. The objective was to make the GFRs facilitate efficiency while following principles of accountability and procedures of financial discipline and administrative due diligence. New rules on non-tax revenues, user charges, e-receipts portal were added in addition to the manner in which autonomous bodies are run.

Department of Revenue

The Department of Revenue exercises control in respect of revenue matters relating to Direct and Indirect Union taxes through two statutory boards namely, the Central Board of Direct Taxes (CBDT) and the Central Board of Excise and Customs (CBEC). The Department is also entrusted with the administration and enforcement of regulatory measures provided

in the enactments concerning Central Sales Tax, Stamp duties and other relevant fiscal statutes. Control over production and disposal of opium and its products is vested in this Department.

Website: www.dor.gov.in

Goods and Services Tax

Legislative Development

The proposal to introduce a national level Goods and Services Tax (GST) was first mooted in 2006-07. The Goods and Services Tax Council was constituted in 2016. GST was implemented in the country in July 2017. Subsuming of various central indirect taxes and levies such as central excise duty, additional excise duties, excise duty levied under the Medicinal and Toilet Preparations (Excise Duties) Act, 1955, Service Tax, Additional Customs Duty commonly known as countervailing duty, special additional duty of customs, and central surcharges and cesses so far as they relate to the supply of goods and services. Coverage of all goods and services, except alcoholic liquor for human consumption, is meant for the levy of Goods and Services Tax. In case of petroleum and petroleum products, it has been provided that these goods shall not be subject to the levy till a date notified on the recommendation of the GST Council. Compensation to the states for loss of revenue arising on account of implementation of the Goods and Services Tax for a period which may extend to five years.

Indian Stamp Act

The Indian Stamp Act, 1899, is a fiscal statute laying down the law relating to tax levied in the form of stamps on instruments recording transactions. Briefly, the scheme relating to stamp duties, provided for in the Constitution is as follows: (i) Under Article 246, stamp duties on documents specified in Entry 91 of the Union List in Schedule VII of the Constitution (viz., bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts) are levied by the Union but under Article 268, each state, in which they are levied, collects and retains the proceeds (except in the case of union territories in which case the proceeds form part of the Consolidated Fund of India). At present duty is

levied on all these documents except cheques, (ii) Stamp duties on documents other than those mentioned above are levied and collected by the states by virtue of the Entry 63 in the State List in the 7th Schedule of the Constitution, (iii) Provisions other than those relating to rates of duty fall within the legislative power of both the Union and the states under Entry 44 of the Concurrent List in the Schedule VII. (iv) The rates of stamp duty in respect of Debenture and Promissory Notes have been rationalised by the central government in September 2008.

Central Board of Direct Taxes

Direct Taxes

The Central Board of Direct Taxes (CBDT), created by the Central Boards of Revenue Act 1963, is the apex body entrusted with the responsibility of administering direct tax laws in India. It is the cadre controlling authority for the Income Tax Department (ITD). With modern information technology as a key driver, the CBDT has implemented a comprehensive computerisation programme in the Income Tax Department. The programme is aimed to establish a taxpayer friendly regime, increase the tax-base, improve supervision and generate more revenue for the government. The endeavour is to promote voluntary compliance by taxpayers and create a non-intrusive and non-adversarial tax administration.

Website: www.incometaxindia.gov.in

Revenue Collection

Revenue collection from direct taxes has been growing consistently. As a result of improved tax administration and better tax compliance, direct tax collection has been showing a positive trend over a period of time.

Legislative Changes

Changes in Personal Income-Tax Rates

In order to encourage more people to come within the tax net, and also to reduce the burden of taxation on honest taxpayers and salaried employees, who are showing their income correctly, the tax rate for individual assessees earning incomes between ₹ 2.5 lakh to ₹ 5 lakh was

reduced to 5 per cent from the earlier rate of 10 per cent. This has reduced the tax liability of all earning incomes below ₹ 5 lakh either to zero (with rebate) or to 50 per cent of their liability under the previous tax rates. In order not to have duplication of benefit, the existing benefit of rebate available to the same group of beneficiaries was reduced to ₹ 2,500 available only to assessees upto income of ₹ 3.5 lakhs. The combined effect of both these measures will mean that there is zero tax liability for people getting income up to ₹ 3 lakhs per annum and the tax liability will only be ₹ 2,500 for people with income between ₹ 3 and ₹ 3.5 lakhs. If the limit of₹1.5 lakh under Section 80C of the Income-Tax Act, 1961, for investment is usedfully, the tax would be zero for people with income of ₹ 4.5 lakhs.

Changes in Corporate Income-Tax Rates

In order to make MSME companies more competitive as compared to large companies and also to encourage firms to migrate to company format, tax rate for smaller companies with annual turnover up to ₹ 50 crore in the Financial Year 2015-16 was reduced to 25 per cent. Percentage-wise, this will benefit 96 per cent of companies in this category.

TDS in the Hindu Undivided Family

In order to widen the scope of tax deduction at source, the Finance Act, 2017 amended the Act to insert a new Section 194-IB in the Act, so as to provide that Individuals or a Hindu Undivided Family (HUF) (other than those covered under 44AB of the Act), responsible for paying to a resident any income by way of rent exceeding fifty thousand rupees for a month or part of month during the previous year, shall deduct an amount equal to 5 per cent of such income as income-tax thereon. It is also provided that tax shall be deducted on such income at the time of credit of rent, for the last month of the previous year or the last month of tenancy if the property is vacated during the year, as the case may be, to the account of the payee or at the time of payment thereof in cash or by issue of a cheque or draft or by any other mode, whichever is earlier.

In order to reduce the compliance burden, it is also further provided that the deductor shall not be required to obtain tax deduction account number (TAN) as per Section 203A of the Income-Tax Act. It is also

further provided that the deductor shall be liable to deduct tax only once in a previous year. It is also further provided that where the tax is required to be deducted as per the provisions of Section 206AA, such deduction shall not exceed the amount of rent payable for the last month of the previous year or the last month of the tenancy, as the case may be.

PAN Quoting Mechanism

Statutory provision for deduction of tax at source (TDS) at higher rate of 20 per cent, or the applicable rate whichever is higher in case of non-quoting of Permanent Account Number (PAN) is made under Section 206AA of the Act since April 2010. PAN acts as a common thread for linking the information in the departmental database. The process of allotment of PAN is simple and robust. PAN application can be made online and PAN gets allotted in less than a week. In order to strengthen the PAN mechanism, a new Section 206CC has been inserted in the Act.

Promoting Digital Transaction

A new Section, 269ST was inserted in the Act which *interalia* restricts acceptance of cash of two lakh rupees or more in the circumstances specified therein, through modes other than an account payee cheque or an account payee bank draft or use of electronic clearing system through a bank account. The provisions of said Section shall not apply to any receipt by the government; any banking company, post office savings bank or co-operative bank; or any transactions referred to Section 269SS and such other persons or class of persons or receipts, which the central government may specify. In order to enforce restriction on cash transactions, a new Section 27IDA has been inserted in the Income-Tax Act, 1961, to provide that if a person contravenes the provisions of Section 269ST, he shall be liable to pay penalty of a sum equal to the amount of such receipt.

Promoting Digital Payments for Small Unorganised Businesses

In order to promote digital transactions and to encourage small unorganised businesses to accept digital payments, Section 44AD of the Income Tax Act has been amended to reduce the existing rate of deemed total income of 8 per cent to 6 per cent in respect of the amount of such total turnover or gross receipts received by an account payee cheque or account payee bank draft or use of electronic clearing system through a

bank account during the previous year or before the due date specified in Sub-section (1) Section 139 in respect of that previous year.

Aadhaar in PAN Application Form and Return of Income

A new Section 139AA has been inserted in the Act. With this, every person who is eligible to obtain Aadhaar number shall, on or after the 1 st day of July, 2017 quote Aadhaar number or Enrolment ID of Aadhaar application form in the return of income and PAN application form. However, the provisions of Section 139AA shall not apply to an individual who does not possess the Aadhaar number or the Enrolment ID and is: (i) residing in Assam, Jammu and Kashmir and Meghalaya; (ii) a non-resident as per the Income-Tax Act, 1961; (iii) of the age of eighty years or more at any time during the previous year; and (iv) not a citizen of India.

e- Governance Initiatives

(a) Permanent Account Number (PAN)

PAN is a 10 digit alpha-numeric number allotted by the Income Tax Department to taxpayers and to the persons who apply for it under the Income Tax Act, 1961. PAN enables the department to link all transactions of the ”person” with the department. The transactions linked through PAN include tax payments, TDS/TCS credits, returns of income/wealth, specified transactions, correspondence, and so on. PAN, thus, acts as an identifier for the ”person” with the Income Tax Department.

(b) Common Business Identification Number (CBIN or BIN)

PAN has now taken on the role of ”identifier” beyond the Income Tax Department as it is now required for various activities like opening of bank account, opening of demat accounts, obtaining registration for Service Tax, Sales Tax / VAT, Excise registration, etc. PAN is leveraged to become Common Business Identification Number (CBIN) or simply Business Identification Number (BIN) for providing registration to a number of government departments and services.

(c) One Person One PAN

The Income Tax Act permits one person to have only one PAN. To avoid issuance of duplicate PAN, the data is checked for duplication by

using the software having phonetic matching algorithm. In order to leverage the biometric data collected through Aadhaar enrolment it was decided to include Aadhaar Card as a valid Proof of Identity (POI), Proof of Date of Birth (PDOB) and Proof of Address (POA) document for allotment of PAN under Income Tax Rules, 1962. In order to further strengthen the de-duplication process, the PAN database is being seeded with Aadhaar number for Individuals and Company Identification Number (CIN) for Corporate Entities.

(d) PAN Service Providers

The services related to PAN such as receiving PAN application forms, verification of the documents submitted, digitising the PAN application form, uploading the data on the NCC (National Computer Centre), printing PAN cards and dispatching of PAN cards have been outsourced to the PAN Service Providers, M/s UTIITSL and M/s NSDLeGov. The Service Providers through their network of more than 20,000 front offices (PAN centers), receive and process the PAN application submitted by applicants. However, the PAN is generated centrally in the department's database through robust software at National Computer Centre (NCC) of the Income Tax Department and thereafter printed and dispatched through service providers.

(e) PAN Verification Facility

PAN verification facility is provided through CBDT's e-filing server to government departments through the Internet. One by one PAN verification or bulk verification of 1,000 PANs in one go through file processing can be done by the users.

PAN can also be verified through "Know Your PAN" facility on Income-Tax official website www.incometaxindia.gov.in where Name, Father's Name and Date of Birth (DOB) /Date of Incorporation (DOI) are known. Service for PAN verification is also provided by income tax PAN Service Providers (UTITSL and NSDLeGov) to agencies such as (i) financial institutions (RBI/Banks); (ii) government agencies; (iii) persons required to file Annual Information Return; (iv) any other entity required to file Annual Information Return; and (v) credit card companies/ institutions, etc.

(f) Grievances Redressal Machinery

Grievance Redressal Machinery related to PAN is well defined. Whenever a grievance is received related to PAN, appropriate action is taken including forwarding the grievance to field formations with guidance and existing instructions. Grievances are also received through Centralised Public Grievance Redressal and Monitoring System (CPGRAMS). All grievances related to PAN are downloaded from the website of CPGRAMS and after examination, appropriate action is taken by the Directorate and information about redressal action taken in such cases, is uploaded on the website. Further, a new mechanism to lodge grievances has been made available to PAN holders and new PAN applicants through eNivaran facility on the eFiling portal. Here, the complainant can pick specifics of complaint and the authority responsible to redress the matter. The entire process is online and besides functionaries of the department PAN Service Providers M/s UTIITSL and M/s NSDL eGov have been integrated to eNivaran mechanism for resolving the grievances of public.

New Initiatives

(a) Integration with e-Biz portal of DIPP

e-Biz programme is a mission mode project of Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, to facilitate the investors by providing Single Window clearance like licensing, environment and land clearances, approvals from various ministries and departments for startup businesses. L1 and L3 integration of PAN and TAN services with e-Biz portal of DIPP has been completed. In L1 integration the applications for PAN and TAN are received through e-Biz portal and forwarded to PAN Service Providers.

(b) Integration with MCA Portal

PAN and TAN processes have been integrated with the process of registration of new companies using a Common Application Form SPICe (INC 32) at MCA portal. PAN and TAN are being allotted in Turn Around Time (TAT) of 4 hours from the time the application data in Form 49A and 49B is received from MCA portal. PAN is being printed on Certificate of Incorporation of new companies along with CIN through this process.

(c) Paperless Application using DSC and eSignature

An online paperless procedure for application of PAN using Digital Signature Certificate and Aadhaar based eSignature has been launched at websites of both service providers M/s NSDL and M/s UTIITSL. In this procedure a person having Digital Signature Certificate or eSignature can apply for PAN through online Form 49A and upload digitally signed application with scanned copies of Proof of Identity, Proof of Date of Birth, Proof of Address, Photograph and Signature without any need for sending physical documents by post.

(d) Paperless Application using Aadhaar based eKYC

Another paperless procedure for allotment of PAN using Aadhaar data and photograph of applicant has been launched. The process is termed as eKYC process where demographic details and photograph of the applicant are populated directly from Aadhaar database by applicant through an authentication process. The applicant signs the application using Aadhaar based eSignature. The process is entirely paperless and without need for any attachments resulting in faster allotment of PAN.

(e) PAN Card

All new applicants and card reprint requests are now being provided option of receiving digitally signed ePAN card on the lines of eAadhaar letter through email. The initiative has reduced the time of transmission of PAN card through post.

(f) Common Service Centres

Common Service Centres (Village Level Enterprises) have been enrolled with PAN Service Providers M/s UTIITSL and M/s NSDLeGov for receiving PAN applications in far-flung corners of the country. The initiative has resulted in outreach of PAN services at the village level.

(g) Electronic Filing of Income Tax Returns

e-Filing of Income tax returns was introduced for the first time in 2006-07 for corporates. This facility is free of cost to taxpayers, e-returns now account for nearly 98 per cent of total returns filed with the Department. The e-filing website which has over 6.2 crore registered users also provides facility for online filing of various types of forms including audit reports, applications and informational statements by taxpayers. More than 50 forms are available online.

(h) IT-enablement of Business Processes

Technology also plays an important role in re-engineering business process within the tax administration to empower employees in delivering outcomes in a consistent and efficient manner. Income Tax Business Application (ITBA) was conceptualised with development of new application for computerisation of all internal processes of Income Tax Department. The main objective of ITBA is to e-enable all internal business processes so that officers and staff are able to increase their efficiency by bringing information and work at a single place for decision making and reduce drudgery in reporting, correspondence and internal approvals.

(i) Unification of Grievance Redressal Systems—e-Nivaran

e-Nivaran aims to fast-track taxpayer's grievance redressal, ensuring early resolution by integrating all the online and physical grievances received by the department and keeping track of it until it reaches its logical conclusion.

(j) National Website of the Income Tax Department http:/incometaxindia.gov.in

A major initiative to enhance taxpayer services was launched by the Income Tax Department in 2014 with the unveiling of the new national website (www.incometaxindia.gov.in). The same was revamped in 2015 and services incorporated keeping in mind feedback received from various users, trade associations and other stakeholders. The website with new layout was made available for the users and tax payers in 2015. Several new features and services that have been incorporated to make it more user-friendly, informative and useful, are listed below.

Major Citizen Friendly Initiatives

Aayakar Sewa Kendra

The 12th report of 2nd ARC aimed at Citizen Centric Governance with the aid of modern technology. The setting up of ASKs is a step in this direction. Aayakar Sewa Kendra (ASK) is the single window system for implementation of Citizen's Charter of the Income Tax Department and a mechanism for achieving excellence in public service delivery. All communications as well as returns received in ASK mandate timely disposal which can be monitored and reviewed at the highest level. This

ensures that a robust architecture of e-Governance is installed and sustained in the Income Tax Department.

Aayakar Setu

The use of smart phone is increasing day by day. With the objective to enhance taxpayer services and mobile access experience, a mobile app (available on Android/IOS platform) and responsive version of the Tax Payer Services (TPS) section at the national website called ”Aayakar Setu” was launched in 2017. ”Aayakar Setu” would facilitate the online payment of the taxes, calculation of taxes, removal of grievances through login to the e-Nivaran module, information about the TPS hierarchy, ASK IT module, Tax Gyaan, TDS/TRACES and other features.

TDS SMS alert Scheme

CBDT has put in place a mechanism for real-time communication to taxpayers (deductees) about information of TDS deduction/deposit by their respective employers or deductors. In order to provide better taxpayer services by providing timely and accurate data to the taxpayers, the scheme for SMS alert to the salaried employees on a quarterly basis has been launched.

Publicity Campaigns

For the last many years, the Department has shifted its communication strategy to portray itself, not, as a purely enforcement agency but also as a taxpayer facilitator, service provider and major contributor in nation building. This strategy has allowed the Department to communicate effectively with the taxpayers acknowledging their contribution in building a secure, progressive and developed nation. Several publicity campaigns were carried out which included campaigns for awareness of due dates of payment of advance tax, filing of returns, filing of TDS statements and issuance of TDS certificates, filing of annual information return, services of TRPs; vigilance awareness week; income declaration scheme; Pradhan Mantri Garib Kalyan Yojana; demonetization; and publication of names of chronic defaulters.

Social Media

The Department has stepped into publicity campaigns through social media channels since 2015 as per the approved Social Media policy. Social Media activities are also being regularly undertaken through the

official Twitter account, i.e., @IncomeTaxIndia. The Twitter account of the Department has more than 1,00,000 followers.

Central Board of Indirect Taxes and Customs

Central Board of Indirect Taxes and Customs (CBIC), (erstwhile Central Board of Excise & Customs) is a part of the Department of Revenue. It deals with the tasks of formulation of policy concerning levy and collection of Customs, Central Excise Duties, Central Goods & Services Tax and IGST, prevention of smuggling and administration of matters relating to Customs, Central Excise, Central Goods & Services Tax, IGST and Narcotics to the extent under CBIC's purview. The Board is the administrative authority for its subordinate organiaations, including Custom Houses, Central Excise and Central GST Commissionerates and the Central Revenues Control Laboratory. The main objectives of CBIC are to collect indirect tax revenues, improve tax payer services, to improve compliance for fair trade and enforcement of border controls and to promote efficiency and transparency and develop human resources for such purposes. The CBIC consists of a Chairman and 6 members.

Website: www.cbic.gov.in

Dispute Settlement and Appeal: The Officers of Customs, Excise and Service Tax have powers to adjudicate cases under the Customs Act, 1962, the Central Excise Act, 1944 and Service Tax Laws (Finance Act, 1994). The appellate machinery comprising the Commissioners (Appeals) deals with appeals against the orders passed by the officers lower in rank than Commissioner of Customs and Central Excise. The Customs, Excise and Service Tax Appellate Tribunal, CESTAT (earlier Customs Excise and Gold (Control) Appellate Tribunal) is an independent forum to hear the appeals against orders and decisions passed by the Commissioners of Customs and Excise under the Customs Act, 1962, Central Excise Act, 1944 and a Second appellate forum against orders passed by Commissioner (Appeals).

Customs

The Indian Customs Electronic Data Interchange (EDI) System (ICES) is an EDI based workflow application which enables: (i)

electronic filing and processing of import and export declarations/manifests; (ii) system appraisal of select goods; and (iii) messaging with custodians and other agencies concerned with cargo clearance. Implemented at 214 locations, ICES cover more than 98 per cent of the country's international trade consignment-wise and 90 per cent value-wise. With more than 200 crore hits annually, the e-commerce web portal, Indian Customs EDI Gateway (ICEGATE), is the single point of interaction between ICES and Partners in the Customs community and provides such services as registration, e-filing, e-payment, document status and helpdesk as well as data exchange between customs and various regulatory and licensing authorities and facilitation of compliant trade (with concomitant reduction in transaction costs and cargo dwell time) and targeting of non-compliant or risky transactions is achieved through the risk management system. In 2016, the then Central Board of Excise and Customs launched Single Window Interface for Facilitating Trade (SWIFT) at all customs EDI locations with six major participating government agencies (PGAs), as a single point interface for clearance of imported goods. SWIFT enables importers to file common electronic 'Integrated Declaration' which compiles the information requirements of customs, FSSAI, plant quarantine, animal quarnatine, drug controller, wildlife control bureau and textile committee and replaces nine separate forms earlier required by these agencies.

Enterprise Data Warehouse

CBIC is one of the first government departments to have implemented an Enterprise Date Warehouse, a central repository of clean and consistent and near real time data pertaining to Customs, Central Excise and Service Tax. It employs best-in-class business intelligence tools for online analytical processing and data mining, and is today the primary source of data and reports required by the CBIC, other ministries and external agencies.

Directorate of Enforcement

Directorate of Enforcement was set up at New Delhi in 1956 for enforcement of the provisions of the Foreign Exchange Regulation Act (FERA), 1947. FERA, 1947 was later replaced by Foreign Exchange Regulation Act, 1973. FERA was a Criminal Act, which provided for

filing of prosecutions in a court of law, besides adjudication of violations by the Adjudicating Authorities. FERA was repealed in 2000 and replaced with Foreign Exchange Management Act, 1999 (FEMA). Subsequently, the Directorate was also entrusted with the responsibility of implementing the Prevention of Money Laundering Act, 2002 (PMLA), which came into force in 2005. At present, the Directorate of Enforcement enforces two laws, viz., the Foreign Exchange Management Act, 1999 (FEMA) and the Prevention of Money Laundering Act, 2002 (PMLA), apart from looking after the residual work initiated under FERA. The Directorate initiates investigations under FEMA for contraventions relating to foreign exchange transactions on the basis of specific intelligence/information and takes appropriate action under FEMA. Complaints are filed before the Adjudicating Authority under the Act. In the event the charge is found substantiated upon adjudication by the competent Adjudicating Authority, penalty up to the maximum of three times of the amount involved in the said contravention can be imposed by the said Authority. Adjudication Authority may also order confiscation of amounts involved in such contravention.

Under the PMLA, the Directorate can initiate investigations only after a Law Enforcement Agency books a case under one of the offences listed in the Schedule to the Act. The Directorate investigates the case to ascertain whether proceeds of crime have been generated from the predicate offence booked by the Law Enforcement Agency, and such proceeds have been laundered. If a *primafaciecase* is made out, the Directorate attaches or seizes the tainted property. The Act also provides for initiating investigations for tracing and immobilising tainted property arising out of transactions having cross-border implications. Such investigations are carried out through Letters of Request with the foreign administrations. The offence of money laundering under PMLA is punishable with imprisonment of not less than three years which may extend to seven years and also with fine. In case of violations pertaining to NDPS Act offences, the imprisonment may extend to 10 years. Upon conviction under PMLA, the attached property is liable to be confiscated.

Website : www.enforcementdirectorate.gov.in

Financial Intelligence Unit-India

Financial Intelligence Unit-India (FIU-IND) is the central national agency for receiving, processing, analysing and disseminating information relating to suspect financial transactions. FIU-IND was established by the Government of India in 2004 for coordinating and strengthening collection and sharing of financial intelligence through an effective national, regional and global network to combat money laundering, related crimes and terrorist financing. It is an independent body reporting to the Economic Intelligence Council (EIC) headed by the Finance Minister. For administrative purposes, FIU-IND is under the Department of Revenue, Ministry of Finance. FIU-IND is established as an administrative FIU, i.e., as an independent government body that receives analyses and disseminates STR to the appropriate law enforcement or investigation agency. FIU-IND does not investigate cases. The main functions of FIU-IND include domestic cooperation, international co-operation, outreach, compliance and administration of an Information Technology based platform (FINnet) providing end-to-end solution for filing, analysis and dissemination of information, including making request and submission of feedback.

Website: www.finindia.gov.in

Narcotics

Narcotics Control

The Narcotics Control Division administers the Narcotic Drugs and Psychotropic Substances Act,1985 (61 of 1985), which prohibits, except for medical and scientific purposes, the manufacture, production, possession, sale, purchase, transport, warehouse, use, consumption, import inter-State, export inter-State, import into India, export from India or transhipment of narcotic drugs and psychotropic substances.

Central Bureau of Narcotics

The Central Bureau of Narcotics (CBN) headed by the Narcotics Commissioner is headquartered at Gwalior. The administrative control of the department lies with CBIC while its operational functions are monitored by the Department of Revenue, the nodal department entrusted with the task of policy decisions over control over narcotic drugs, psychotropic substances and precursor and essential chemicals used in the manufacture of the Narcotic Drugs and Psychotropic Substances

(NDPS). It performs the function of National Opium Agency for India under the Single Convention on Narcotics Drugs 1961 to exercise control and supervision over opium/poppy cultivation, which is presently undertaken in selected notified areas of Madhya Pradesh, Uttar Pradesh and Rajasthan. In addition to the work relating to control over opium/poppy cultivation, the CBN takes preventive action against drug trafficking and enforces the provisions of the Narcotic Drugs and Psychotropic Substances Act, 1985 and Rules made thereunder.

Government Opium and Alkaloid Factories

The Government Opium and Alkaloid Factories (GOAF), under the administrative control of the Department of Revenue, are engaged in the processing of raw opium for export purposes and manufacture of opiate alkaloids. The organisation is headed by the Chief Controller of Factories.

The Narcotics Control Division administers the Narcotic Drugs and Psychotropic Substances Act,1985 (61 of 1985), which prohibits, except for medical and scientific purposes; the manufacture; production; possession; sale; purchase; transport; warehouse; use; consumption; import inter-State; export inter-State; import into India; export from India; or transhipment of narcotic drugs and psychotropic substances.

Customs, Excise and Service Tax Appellate Tribunal

Customs, Excise and Service Tax Appellate Tribunal (earlier known as Customs Excise and Gold (Control) Appellate Tribunal) was formed as a quasi-judicial body to hear appeals from the orders and decisions passed by the Commissioner/ Commissioner (Appeals) of Customs, Central Excise and Service Tax under the Customs Act, 1962, Central Excise Act, 1944 and Finance Act, 1994 respectively. The Tribunal is also having appellate jurisdiction on Antidumping matters and such matters are heard by special bench headed by the President, CESTAT. The headquarters and Principal Bench of the Tribunal is situated at Delhi. The regional benches are situated at Mumbai, Kolkata, Chennai, Bengaluru, Ahmedabad, Chandigarh, Allahabad and Hyderabad having separate territorial jurisdiction. Whereas Delhi and Mumbai have 4 Benches each, Chennai has 2 Benches and all the other places have one Bench each. Each Bench of this Tribunal consists of a judicial member and a Technical Member.

Department of Financial Services

The Department of Financial Services (DFS) is mainly responsible for policy issues relating to Public Sector Banks (PSBs) and Financial Institutions including their functioning, appointment of Chairman, Managing Director and Chief Executive Officers (MD & CEOs), Executive Directors (EDs), Chairman cum Managing Directors (CMDs), legislative matters, international banking relations. Appointment of Governor/Deputy Governor of Reserve Bank of India, matters relating to National Bank for Agriculture and Rural Development (NABARD), Agriculture Finance Corporation, Co-operative Banks, Regional Rural Banks (RRBs) and rural/agriculture credit. The Department also administers the financial inclusion programme of the government; social security schemes and othertargeted schemes aimed at facilitating flow of credit; matters relating to insurance sector and performance of public sector insurance companies; administration of various Insurance Acts; and matters relating to Insurance Regulatory and Development Authority of India (IRDAI) and matters relating to pension reforms including the New Pension System (NPS), etc.

It also covers pension reforms and industrial finance and micro, small and medium enterprises. It started the Pradhan Mantri Jan Dhan Yojana. Pension Fund Regulatory and Development Authority (PFRDA) is a statutory body which also works under this Department.

Website : www.financialservices.gov.in

Banking

Banking industry is crucial to the economy of any nation as it channelises savings and investments to provide capital for economic growth. In India, banks have played a vital role in financial inclusion of the general population by providing access to basic financial services to unbanked households and formal credit to the agriculture sector and micro-enterprises. Public Sector Banks (PSBs) are the mainstay of the Indian banking industry. PSBs and PSB-sponsored Regional Rural Banks (RRBs) have dominant market presence and constitute 78 per cent of the bank network of Scheduled Commercial Banks (SCBs). In rural locations, this share is even higher at 87 per cent. PSBs play an important

role in fuelling investment needed for the country's economic development, with a share of over 70 per cent of SCBs' deposits and 66 per cent of outstanding credit. In rural and semi-urban (RUSU) locations, their share is even higher at 88 per cent of saving account deposits and 81 per cent of outstanding credit. PSBs and RRBs play a critical role in priority sector lending and account for 74 per cent of outstanding credit to small and marginal farmers, 65 per cent of outstanding credit to Micro and Small Enterprises and 95 per cent of education loans.

Reserve Bank of India

The Reserve Bank of India (RBI) is India's central banking institution, which controls the monetary policy of the Indian rupee. It commenced its operations on April 1,1935 in accordance with the Reserve Bank of India Act, 1934. Following India's independence on 15 August 1947, the RBI was nationalised on January 1, 1949.

The RBI has four zonal offices at Chennai, Delhi, Kolkata and Mumbai. It has 21 regional offices and 11 sub-offices throughout India. Regional offices are located in Ahmedabad, Bengaluru, Bhopal, Bhubaneswar, Chandigarh, Chennai, Delhi, Guwahati, Hyderabad, Jaipur, Jammu, Kanpur, Kochi, Kolkata, Dewas, Lucknow, Mumbai, Nagpur, Patna, Dehradun and Thiruvananthapuram and sub-offices are at Agartala, Aizawal, Dehradun, Gangtok, Imphal, Panaji, Raipur, Ranchi, Shillong, Shimla and Srinagar.

As the central bank of India, RBI is an independent apex monetary authority which regulates banks and provides important financial services like storing of foreign exchange reserves, control of inflation, and monetary policy report. A central bank is known by different names in different countries. The functions of a central bank vary from country to country and functions as autonomous or quasi-autonomous body. A central bank is a vital financial apex institution of an economy and the key objects of central banks may differ from country to country; still they perform activities and functions with the goal of maintaining economic stability and growth of an economy.

The RBI plays an important part in the Devlopment Strategy of the country. It is a member bank of the Asian Clearing Union. The general superintendence and direction of the RBI is entrusted with the 21 - member central board of directors which has: the governor; four deputy

governors; two finance ministry representatives; ten government-nominated directors to represent important elements of India's economy; and four directors to represent local boards headquartered at Mumbai, Kolkata, Chennai and New Delhi.

The central bank executes many functions such as overseeing monetary policy, issuing currency, managing foreign exchange, working as a bank for government and as a banker of scheduled commercial banks. It also works for overall economic growth of the country. The primary objective of RBI is to undertake consolidated supervision of the financial sector comprising commercial banks, financial institutions and non-banking finance companies.

Payment and settlement systems play an important role in improving overall economic efficiency. The Payment and Settlement Systems Act of 2007 (PSS Act) gives the Reserve Bank oversight authority, including regulation and supervision, for the payment and settlement systems in the country. In this role, the RBI focuses on the development and functioning of safe, secure and efficient payment and settlement mechanisms. Two payment systems - National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) - allow individuals, companies and firms to transfer funds from one bank to another. These facilities can only be used for transferring money within the country. With increasing integration of the Indian economy with the global economy arising from greater trade and capital flows, the foreign exchange market has evolved as a key segment of the Indian financial market and RBI has an important role to play in regulating and managing this segment. It manages forex and gold reserves of the nation.

RBI is the sole body that is authorized to issue currency in India. The bank also destroys the same when they are not fit for circulation. All the money issued by the central bank is its monetary liability, i.e., the central bank is obliged to back the currency with assets of equal value, to enhance public confidence in paper currency. The objectives are to issue bank notes and give public adequate supply of the same, to maintain the currency and credit system of the country to utilise it in its best advantage, and to maintain the reserves. For printing of notes, the Security Printing and Minting Corporation of India Limited (SPMCIL), a wholly owned company of the Government of India, has set up printing

presses at Nashik, Maharashtra and Dewas, Madhya Pradesh. The Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL), also has set up printing presses in Mysuru in Karnataka and Salboni in West Bengal. In all, there are four printing presses. For minting coins, SPMCIL has four mints at Mumbai, Noida (UP), Kolkata and Hyderabad.

In order to curb the fake currency, RBI has launched a website to raise awareness among masses about fake notes in the market. www.paisaboltahai.rbi.org.in provides information about identifying fake currency.

Website: www.rbi.org.in

Regional Rural Banks

The Regional Rural Banks (RRBs) were established under Regional Rural Banks Act, 1976, to create an alternative channel to the cooperative credit structure and to ensure sufficient institutional credit for the rural and agriculture sector. RRBs are jointly owned by Government of India, concerned state government and sponsor banks with the issued capital shared in the proportion of 50 per cent, 15 per cent and 35 per cent, respectively.

Agriculture Credit

In order to boost the agriculture sector with the help of effective and hassle-free agriculture credit, the government has been fixing annual targets for ground level agriculture credit by Scheduled Commercial Banks, Regional Rural Banks (RRBs) and Cooperative Banks. Year-wise position of target and achievement under agricultural credit flow for the last five years indicates the sustained trend of actual disbursement, surpassing the incremental annual targets year after year.

Kisan Credit Card

The Kisan Credit Card (KCC) scheme was introduced in 1998-99, as an innovative credit delivery system aiming at adequate and timely credit support from the banking system to the farmers for their cultivation needs including purchase of inputs in a flexible, convenient and cost effective manner. The scheme is being implemented by all cooperative banks, RRBs and public sector commercial banks throughout the country. KCC is one of the most effective tools for delivering agriculture credit.

NABARD monitors the scheme in respect of cooperative banks and RRBs and RBI in respect of commercial banks. A new scheme for KCC has been circulated by RBI and NABARD which provides for KCC as an ATM card which can be used at ATM/Point of Sale (POS) terminal.

Rural Infrastructure Development Fund

The central government established a fund to be operationalised by NABARD, namely, the Rural Infrastructure Development Fund (RIDF), which was set up within NABARD during 1995-96 by way of deposits from Scheduled Commercial Banks operating within the country from the shortfall in their agricultural/priority sector/weaker sections lending. The fund has since been continued, with its allocation being announced every year in the Union Budget. Over the years, coverage under the RIDF has been broad-based, in each tranche, and at present, a wide range of 34 activities are financed under various sectors.

Insurance

Insurance, being an integral part of the financial sector, plays a significant role in India's economy. Apart from protection against mortality, property and casualty risks and providing a safety net for individuals and enterprises in urban and rural areas, this sector encourages savings and provides long-term funds for infrastructure development and other long gestation projects of the country. The development of the insurance sector is necessary to support its continued economic transformation. The public sector insurance companies operating in the sector are: 1. Life Insurance Corporation; 2 National Insurance Company Limited; 3. Oriental Insurance Company Limited; 4. United India Insurance Company Limited; 5. New India Assurance Company Limited; 6. General Insurance Corporation of India Limited; and 7 Agriculture Insurance Company of India Limited.

Life Insurance Corporation of India

Life Insurance Corporation of India (LIC) was established by an Act of Parliament called the Life Insurance Corporation of India Act, 1956. It is governed by the Insurance Act, 1938, LIC Act, 1956, LIC Regulations, 1959 and Insurance Regulatory and Development Authority Act, 1999. As on March 31, 2016, LIC has 8 zonal offices, 113 divisional offices, 2,048 branch offices, 73 customer zones, 1,401 satellite offices and 1,240

mini offices in the country. LIC is present in 14 countries abroad through branch offices/joint ventures companies and wholly owned subsidiary.

Website: www.licindia.in

Reforms in the Insurance Sector

The insurance sector was opened for private participation with the enactment of the Insurance Regulatory and Development Authority Act, 1999. The Insurance Regulatory and Development Authority of India (IRDAI) is functioning from its head office in Hyderabad, Telangana. The core functions of the authority include: (i) licencing of insurers and insurance intermediaries; (ii) financial and regulatory supervision; (iii) regulation of premium rates; and (iv) protection of the interests of the policyholders. With a view to facilitate development of the insurance sector, the authority has issued regulations on protection of the interests of policyholders: obligations towards the rural and social sectors; and micro insurance and licensing of agents, corporate agents, brokers, surveyors and third party administrators. IRDAI has also laid down the regulatory framework for registration of insurance companies, maintenance of solvency margin, investments and financial reporting requirements. Since the opening up this sector for private and foreign investment, the number of participants in the insurance industry has gone up from seven insurers to 68 insurers as on March 31, 2018 operating in the life, general, and re-insurance segments including specialised insurers, namely Export Credit Guarantee Corporation and Agricultural Insurance Company (AIC).

One of the key reforms undertaken in this sector is the passing of Insurance Laws (Amendment) Act, 2015 which paved the way for major reform related amendments in the Insurance Act, 1938, the General Insurance Business (Nationalization) Act, 1972 and the Insurance Regulatory and Development Authority (IRDA) Act, 1999. The Insurance Laws (Amendment) Act 2015 seamlessly replaced the Insurance Laws (Amendment) Ordinance, 2014. The amendment Act removed archaic and redundant provisions in the legislations and incorporated certain provisions to provide Insurance Regulatory and Development Authority of India (IRDA) the flexibility to dischange its functions more effectively and efficiently. It also provided for enhancement of the foreign investment cap in an Indian insurance company from 26 per cent

to an explicitly composite limit of 49 per cent with the safeguard of Indian ownership and control. The Insurance Laws (Amendment) Act, 2015, also enabled foreign reinsurers to set up branches in India. It also enable Lloyds of UK and its members to operate in India through setting up of branches for the purpose of reinsurance business or as investors in an Indian Insurance Company within the 49 per cent cap.

Pradhan Mantri Vyay Vandana Yojana

Government launched the Pradhan Mantri Vyay Vandana Yojana (PMWY) to protect elderly persons aged 60 years and above against a future fall in their interest income due to the uncertain market condition, as also to provide social security in old age. The Scheme is being implemented through LIC of India. It provides an assured return of 8 per cent per annum payable monthly for 10 years. The differential return, i.e., the difference between return generated by LIC and the assured return of 8 per cent would be borne by Government of India as subsidy on annual basis. It was open for subscription for a period of one year, i.e., from May 4, 2017 to May 3, 2018.

Aam Aadmi Bima Yojana

For the benefit of the weaker sections of the society, Government of India floated a highly subsidised insurance scheme, viz., Aam Aadmi Bima Yojana (AABY) which is administered through Life Insurance Corporation of India. Under this social security scheme below poverty line (BPL) and marginally above poverty line citizens are covered under 48 identified occupations. The scheme provides death cover of ₹ 30,000/- in case of natural death. In case of death or total disability (including loss of two eyes/two limbs) due to accident, a sum of ₹ 75,000/- and in case of partial permanent disability (loss of one eye/limb) due to accident, a sum of ₹ 37,500/- is payable to the nominee/beneficiary. All these benefits are paid for a nominal premium of ₹ 200/- per member per annum, out of which ₹ 100/- is borne by the central government through Social Security Fund maintained through LIC of India, and the balance premium of ₹ 100/- is borne by the member and/or nodal agency and/or central/state government department which acts as the nodal agency. In addition, there is an add on benefit of scholarship at the rate of ₹ 1,200/- per annum per child for two children per family of the insured members studying from 9th to 12th standard (including ITI courses).

Social Security Schemes

Atal Pension Yojana

The Atal Pension Yojana (APY) was launched in May 2015, to address the longevity risks among the workers in unorganised sector who are not covered under any statutory social security scheme. The APY is focused on all citizens in the unorganised sector, who join the National Pension System (NPS) administered by the Pension Fund Regulatory and Development Authority (PFRDA).

Any Indian citizen between 18-40 years of age can join through their savings bank account/post office savings account. Minimum pension of ₹ 1,000 or ₹ 2,000 or ₹ 3,000 or ₹ 4,000 or ₹ 5,000 is guaranteed by the Government of India to the subscriber at the age of 60 years, with a minimum monthly contribution (for those joining at age at 18) of 42 or 84 or 126 or 168 or 210, respectively. After the subscriber's demise, the spouse of the subscriber shall be entitled to receive the same pension amount as that of the subscriber until the death of the spouse. After the demise of both the subscriber and the spouse, the nominee of the subscriber shall be entitled to receive the pension wealth, as accumulated till age 60 of the subscriber.

Revisions in APY

In the event of pre-mature death of the subscriber, the government has decided to give an option to the spouse of the subscriber to continue contributing to APY account of the subscriber, for the remaining vesting period, i.e., till the original subscriber would have attained the age of 60 years. The earlier provision was to handover lump sum amount to spouse on the premature death (death before 60 years of age) of the subscriber. The spouse of the subscriber shall be entitled to receive the same pension amount as that of the subscriber until the death of the spouse. After the death of both the subscriber and the spouse, the nominee of the subscriber shall be entitled to receive the pension wealth, as accumulated till 60 years of the subscriber.

In order to facilitate subscribers with the convenience and accessibility of his/her APY account, Mobile Application for APY has been launched by PFRDA. This has enabled mobile operations for empowering the subscribers to view Statement of Account and other

details of their APY account. All APY subscribers can download NPS Lite mobile applications from Google Store and install in their mobile phones for real time viewing of APY accounts. To experience the features, the subscribers need to visit https://npslite-nsdl.com/CRAIite/ website and can explore as per their requirement.

Pradhan Mantri Jeevan Jyoti BimaYojana

Government announced three ambitious social security schemes pertaining to the insurance and pension sectors, namely Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) and the Atal Pension Yojana (APY) to move towards creating a universal social security system, targeted especially for the poor and the under-privileged. PMJJBY is a one-year life insurance scheme, renewable from year to year, offering coverage of ₹ 2 lakhs for death due to any reason and is available to people in the age group of 18 to 50 years (life cover up to 55 years of age) having a bank account who give their consent to join and enable auto-debit. It involves convenient bank account linked enrolment with implementation in IT mode, and premium payment through auto-debit from the bank account of the subscriber. Implementation of this scheme enables affordability and targeting in favour of the poor and the under-privileged and would address the situation of low penetration of life insurance in the country.

Pradhan Mantri Suraksha Bima Yojana

The Pradhan Mantri Suraksha Bima Yojana (PMSBY) is a one-year personal accident insurance scheme, renewable from year to year, offering coverage for death/disability due to an accident and is available to people in the age group of 18 to 70 years having a bank account who give their consent to join and enable auto-debit. Under the said scheme, risk coverage available will be ₹ 2 lakh for accidental death and permanent total disability and ₹ 1 lakh for permanent partial disability. It involves convenient bank account linked enrolment with implementation in IT mode, and premium payment through auto-debit from the bank account of the subscriber. Implementation of this scheme enables affordability and targeting in favour of the poor and the under-privileged and would address the situation of low penetration of accident insurance in the country.

Pradhan Mantri Jan Dhan Yojana

With a view to increasing banking penetration and promoting financial inclusion and with the main objective of covering all households with at least one bank account per household across the country, a National Mission on financial inclusion named as (PMJDY) was announced in 2014.

Objectives of PMJDY include: (i) universal access to banking facilities for all households across the country through a bank branch or a fixed point business correspondent (BC) within a reasonable distance; and (ii) to cover all households with atl east one basic bank account with RuPay Debit card having in-built accident insurance cover of ₹ 1 lakh.

Pension Reforms

National Pension System

With a view to providing adequate retirement income, the National Pension System (NPS) was introduced. It has been made mandatory for all new recruits to the government (except armed forces) with effect from January 1, 2004, and has also been rolled out for all citizens with effect from May 1, 2009, on a voluntary basis. The features of the NPS design are: self-sustainability, portability and scalability. Based on individual choice, it is envisaged as a low cost and efficient pension system backed by sound regulation. As a pure 'defined contribution' product, returns would be totally market driven. The NPS provides various investment options and choices to individuals to switch over from one option to another or from one fund manager to another, subject to certain regulatory restrictions. The NPS architecture is transparent and web-enabled. It allows a subscriber to monitor his/ her investments and returns. The facility for seamless portability is designed to enable subscribers to maintain a single pension account (Permanent Retirement Account Number-PRAN) throughout the saving period. Pension Fund Regulatory and Development Authority (PFRDA), set up as a regulatory body for the pension sector, is engaged in consolidating the initiatives taken so far regarding the full NPS architecture and expanding the reach of NPS distribution network. The process of making NPS available to all citizens entailed the appointment of NPS intermediaries, including institutional entities as Point of Presence (POPs) that serve as pension account opening and collection centres, a Centralized Record Keeping

Agency (CRA) and Pension Funds to manage the pension wealth of the investors. The Department of Posts has also been appointed as PoP in addition to other financial institutions which expand the PoP-SP network by more than five times.

A Mobile App for NPS is available for the subscribers in Google Play Store as 'NPS by NSDL e-Gov' and and 'NPS by Karvy-CRA'. Subscribers can access their account through this. The following new features are enabled in Mobile App to facilitate the subscriber's interface with the system: Aadhaar can be linked to NPS account using this app; grievances/queries under NPS can be raised through it; status of grievance along with resolution details can be viewed; subscriber can reset his/her password using this App; and the bilingual version of the App has been developed for convenience of NPS subscribers.

The Retirement Advisers (RAs) are appointed by PFRDA to engage in the activity of providing personalised advice on pension, retirement and NPS, thereby extending its outreach. The RAs can be an individual, registered partnership firm, corporate bodies, or any registered trust or society. The online platform has been developed to facilitate registration of an individual/entity as Retirement Adviser. In order to ease the process of registration of subscribers through Retirement Advisers a hyperlink is provided in welcome screen of RA. This link will re-direct the user to eNPS where he/she can enter RA code and initiate the process of subscriber registration. The Pension Sanchay; a dedicated website (www.pensionsanchay.org.in) is an initiative of PFRDA for increasing financial literacy with special emphasis on concepts of pension and retirement.

Swavalamban Scheme

To encourage the workers in the unorganised sector to save voluntarily for their old age, an initiative called Swavalamban Scheme was launched in 2010. It is a co-contributory pension scheme whereby the central government contributes a sum of ₹ 1,000 per annum in each NPS account opened having a saving of ₹ 1,000 to ₹ 12,000 per annum.

Rural Housing Fund

The Rural Housing Fund was set up in 2008-09 to enable primary lending institutions to access funds for extending housing finance to targeted groups in rural areas at competitive rates.

Pradhan Mantri Mudra Yojana

There are a large number of small business units, estimated at around 5.77 crore in the informal sector, running small manufacturing, trading or service businesses, who find it difficult to access formal systems of credit. The loan requirement of these units is generally below ₹ 10 lakh. While a number of initiatives were taken in the past to improve access to formal credit channels for such units, there was still a significant and large section to which the loan/credit facilities did not percolate. For such units, a scheme, namely, Pradhan Mantri Mudra Yojana (PMMY) was launched in 2015, to enable income generating small business enterprises to have access to loans. Accordingly, lending institutions would finance micro entrepeneurs up to ₹ 10 lakh. PMMY is a national mission aimed at increasing the entrepreneurial activity of existing small business and encouraging first generation entrepreneurs.

Micro Units Development and Refinance Agency Limited (MUDRA), is a refinance institution set up by the government for development of micro units by extending funding support to encourage entrepreneurship in India, mostly from non-corporate small business sector. Under the guidelines of PMMY, MUDRA has launched three innovative products namely Shishu, Kishor, and Tarun, which signifies the stage of growth and funding needs of the micro units or entrepreneur. MUDRA shall refinance through state level institutions, NBFCs, MFIs, regional rural banks, nationalised banks, private banks and other intermediaries. Any Indian citizen who is involved in income generating activity such as manufacturing, processing, trading and service sector and whose credit need is less than ₹ 10 lakh can approach either banks, MFIs, financial institutions or NBFC for availing of MUDRA loans under PMMY. It has been since decided to extend funding support under PMMY for activities allied to agriculture also.

The government has taken various steps towards effective implementation of the scheme. These, inter alia, include intensive publicity campaigns, simplification of application forms, credit guarantee scheme, refinance from MUDRA Ltd, nomination of Mudra Nodal Officer, weekly video conferences to monitor the progress, etc.

Credit Guarantee Fund for Skill Development

To guarantee the loans and advances up to ₹ 1.5 lakh (term loan) or any other limit as may be decided by the settler, sanctioned and disbursed by the lending institutions without any collateral security and/or third party guarantees. This can be given to the eligible borrowers pursuing skill development courses as per the Skill Loan Scheme. Any person (Indian national) can avail of skill loan having minimum qualification as per National Skill Qualification Framework (NSQF).

Department of Investment and Public Asset Management

The Department of Disinvestment was set up as a separate Department in 1999 and was later renamed as Ministry of Disinvestment in 2001. From 2004, the Department of Disinvestment has been one of the departments under the Ministry of Finance. The Department of Disinvestment has been renamed as Department of Investment and Public Asset Management (DIPAM) from 2016. The mandate of the Department includes all matters related to management of central government investments in equity including disinvestment of equity in central Public Sector Undertakings; decisions on the recommendations of administrative ministries, NITI Aayog, etc., for disinvestment including strategic disinvestment; all matters related to Independent External Monitor(s) for disinvestment and public asset management and financial policy in regard to the utilisation of the proceeds of disinvestment channelised into the National Investment Fund.

Website: www.dipam.gov.in

Disinvestment Policy

The Policy on Disinvestment has evolved considerably. The salient features of the Policy include: (a) public sector undertakings are the wealth of the nation and to ensure this wealth rests in the hands of the people, promote public ownership of Central Public Sector Enterprises (CPSEs); (b) while pursuing disinvestment through minority stake sale in listed CPSEs, the government will retain majority shareholding, i.e., at least 51 per cent of the shareholding and management control of the Public Sector Undertakings; and (c) strategic disinvestment by way of sale of substantial portion of government shareholding in identified CPSEs up to 50 per cent or more, alongwith transfer of management control.

National Investment Fund

Government constituted the National Investment Fund (NIF) in 2005 into which the proceeds from disinvestment of Central Public Sector Enterprises were to be channelised. The corpus of NIF was to be of a permanent nature and NIF was to be professionally managed to provide sustainable returns to the government, without depleting the corpus. Selected Public Sector Mutual Funds, namely UTI Asset Management Company Ltd., SBI Funds Management Private Ltd. and LIC Mutual Fund Asset Management Company Ltd. were entrusted with the management of the NIF corpus. As per this Scheme, 75 per cent of the annual income of the NIF was to be used for financing selected social sector schemes which promote education, health and employment. The residual 25 per cent of the annual income of NIF was to be used to meet the capital investment requirements of profitable and revivable PSUs.

In view of the difficult economic situation caused by the global slowdown of 2008-09 and a severe drought in 2009-10, the government approved a change in the policy for utilisation of Disinvestment proceeds by granting a one-time exemption to utilise the disinvestment proceeds directly for selected social sector schemes allocated by Department of Expenditure/Planning Commission. In order to align the NIF with the Disinvestment Policy, the government decided that the disinvestment proceeds, with effect from the fiscal year 2013-14, will be credited to the existing NIF which is a public account under the Government Accounts and the funds would remain there until withdrawn/invested for the approved purposes.

It was also simultaneously decided that the NIF would be utilised for the following purposes: subscribing to the shares being issued by the CPSE on rights basis so as to ensure that 51 per cent ownership of the government in CPSEs is not diluted; preferential allotment of shares of the CPSE to promoters as per SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 so that government shareholding does not go down below 51 per cent in all cases where the CPSEs desire to raise fresh equity to meet their Capex programme, the government further approved inclusion of the following purposes to be financed from the NIF. Investment by government in RRBs/ IIFCL/NABRAD/Exim Bank; equity infusion in various Metro projects; investment in Bhartiya

Nabhikiya Vidyut Nigam Limited and Uranium Corporation of India Ltd; investment in Indian Railways towards capital expenditure.

Demonetisation of Banknotes

The government demonetised 500 and 1,000 banknotes on November 8, 2016. All 500 and 1,000 banknotes of the Mahatma Gandhi series ceased to be legal tenders in India from November 9, 2016. New 500 and 2,000 banknotes of the Mahatma Gandhi New Series in exchange for the old banknotes were announced. However, the banknote denominations of 100, 50, 20, 10 and 5 of the Mahatma Gandhi series remained legal tender and were unaffected by the policy. The government said that the demonetisation move was an effort to stop counterfeiting of the current banknotes allegedly used for funding terrorism, as well as a crackdown on black money in the country.

14 Corporate Affairs

THE Ministry of Corporate Affairs (MCA) is primarily concerned with administration of the Companies Act, 2013, the Companies Act, 1956, the Limited Liability Partnership Act, 2008 and other allied Acts and rules and regulations framed thereunder mainly for regulating the functioning of the corporate sector. The Ministry is also responsible for administering the Competition Act, 2002, to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers through the commission set up under the Act.

Besides, it exercises supervision over the three professional bodies, namely, Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries of India (ICSI) and the Institute of Cost Accountants of India (ICAI), which are constituted under three separate Acts of the Parliament for proper and orderly growth of the professions concerned. The Ministry also has the responsibility of carrying out the functions of the central government relating to administration of Partnership Act, 1931, the Companies (Donations to National Funds) Act, 1951 and Societies Registration Act, 1860.

Website : www.mca.gov.in

Administrative Structure

The Ministry has a three-tier organisational structure with the headquarters at New Delhi; seven offices of Regional Directors (RDs) at Ahmedabad, Chennai, Hyderabad, Kolkata, Mumbai, New Delhi and Shillong; fifteen Registrars of Companies (RoCs); fourteen Official Liquidators (OLs); and nine RoC-cum-OLs in states and union territories.

The jurisdictional Registrars of companies, continue to have jurisdiction over the companies incorporated by the Registrar, CRC under the Companies Act, 2013, for all other provisions of the Act and the rules made thereunder, which may be relevant after incorporation. The Official Liquidators function under the overall administrative control of the

Ministry, and are attached to corresponding High Courts. They are mainly responsible for implementing court orders regarding liquidation and final dissolution of the companies.

Central Registration Centre

The project to transform the processing of company incorporation, e-forms was undertaken with one clear objective, i.e., applications for name reservation and incorporation of a company could be processed and completed within D+1 days (D=Date of Payment Confirmation) in line with global best practices. The MCA rolled out the first phase of Central Registration Centre (CRC) in 2016 for processing name reservation of applicants and second phase of CRC for processing incorporation of company applicants in 2016. The Government Process Reengineering (GPR) exercise is in pursuance of the Ministry's objective of providing greater "Ease of Doing Business" to all the stakeholders and has resulted in faster processing of incorporation related applications, uniformity in application of rules, and eradicating discretion.

The time taken for processing company incorporation applications has been reduced drastically from between 5 to 15 working days in June 2014, to an average of 0.6 working days in March 2017. Similarly, the processing time for name availability applications has been brought down significantly from between 5 to 6 working days in June 2014, to an average of 0.4 days in March 2017. In addition, more than 90 per cent applications are being approved within one working day. This has resulted in speed, greater transparency, uniformity and eradication of discretion.

Ease of Doing Business

The Ministry has prescribed a Simplified Proforma for Incorporating Companies (SPICe) along with e-MOA (Electronic-Memorandum of Association) and e-AoA (Electronic-Articles of Association) which eliminates the requirement of physically signing the Memorandum of Association (MoA) and Articles of Association (AoA) by the applicant and helps entrepreneurs to start business in India, without much hassle. The fee for filing the incorporation form has been reduced from ₹ 2,000 to ₹ 500. The integrated form INC-29 has been replaced with SPICe

Form. This incorporation form is being processed within 1 -2 working days. Electronic integration of MCA21 System with the Central Board of Direct Taxes (CBDT) for issue of PAN and first TAN to an incorporated company using the Simplified Proforma for Incorporating Company Electronically (SPICe) has been undertaken. Stakeholders now submit applications for PAN and TAN at the time of submitting applications for incorporation. The PAN allotted by Income Tax Department is being affixed on the Certificate of Incorporation of the Company from February 2017. This has resulted in reduction in the number of processes and time taken for starting a business in the country.

SPICe is a more versatile form and leverages on digital technology by eliminating the need for hard copies of physically signed documents being attached to an e-form. Using the integrated e-form SPICe, stakeholders can apply for five services simultaneously, viz., company name, company incorporation, DIN of the directors, Permanent Account Number (PAN) and Tax Deduction and Collection Account Number (TAN) for the newly incorporated company. Rule 15 of the Companies Rules, 2014 (Meetings of the Board and its Powers), was amended in 2017 to reduce the threshold to "10 per cent" of the networth/ turnover as the case may be against the earlier threshold of exceeding 10 per cent thereby needing approval of members instead of only board. Common seal under Companies Act, 2013, has been made optional. The requirement for obtaining certificate of commencement of business and requirement for minimum paid up share capital for all companies have been done away with under Companies Act, 2013.

The efforts of the government have paid dividends. According to the Doing Business Report (DBR) of the World Bank, India has jumped 23 positions against its rank of 100 in 2017 to 77 among 190 countries.

The Companies Act, 2013, seeks to bring corporate governance and regulatory practices in India at par with global best practices. The corporate sector has been given more flexibility in regulating its own affairs, subject to full disclosure and accountability of its actions, while minimising government interference. The Act provides more opportunities for new entrepreneurs and enables wide application of information technology in the conduct of affairs by corporates. Key features of the Act are given here.

Key Features of the Companies Act, 2013

I. Business Friendly Corporate Regulations/Pro-Business Initiatives

- Provision of self-regulation with disclosures/transparency instead of 'Government approval based regime'.
- Automation of corporate records/meetings - statutory recognition for: (i) maintenance of documents by companies in electronic form; and (ii) 'video-conferencing' as a mode of conducting board meetings, etc.
- Faster mergers and acquisitions including short form of mergers and cross-border mergers.
- Summary liquidation: For companies having net assets of ₹ 1 crore or less, Official Liquidators (OLs) are empowered with adjudicatory powers.
- National Company Law Tribunal (NCLT) has been constituted under Section 408 in 2016.
- Concept of 'dormant companies' introduced (companies not engaged in business for two consecutive years can be declared as dormant).
- Concept of One Person Company (OPC) introduced.

II. Good Corporate Governance and Corporate Social Responsibility (CSR)

- Concept of Independent Directors (IDs) included as a statutory requirement u/s 149 (4).
- Provision for constitution of several committees of the Board (Audit Committee, Nomination and Remuneration Committee, Stakeholders Relationship Committee and CSR Committee).
- Woman Director for prescribed class of companies.
- Mandatory provision for constitution of CSR Committee and formulation of CSR Policy, with mandatory disclosure, for prescribed class of companies.

III. Enhancing Accountability of Management

- The term 'Officer in Default' has been reviewed to make it more relevant.

- Terms like ‘Key Managerial Personnel’ (KMP) and ‘Promoter’ have been defined to affix responsibility on key functionaries of the company.
- Duties of Directors defined, including to shareholders, employees, the community and environment.
- Cap on number of Directorships: 20 companies, of which 10 can be public companies.

IV. Strengthened Enforcement

- The central government to have powers to order investigation, suo-motu, in public interest.
- Statutory recognition of Serious Fraud Investigation Office (SFIO).
- Special Courts have been constituted under Section 435 in 2016.
- Search and seizure of documents, during investigation, without an order from a Magistrate.
- Freezing of assets or disgorgement of illegal gains of company under investigation.

V. Audit Accountability

- Recognition of accounting and auditing standards.
- Stricter disqualification norms for auditors.
- Auditor not to perform specified non-audit services.
- Tenure or rotation of auditors prescribed.
- Internal audit for bigger companies.
- Substantial civil and criminal liability for an auditor in case of non-compliance.
- Tribunal empowered to direct a change of auditor in case of a fraud detected.
- Cost records and cost audit for prescribed class of companies.
- Secretarial audit for prescribed class of companies.
- National Financial Reporting Authority (NFRA) to be constituted.
- Protection of minority shareholders.
- Exit option provided, if there is dissent to change in object clause, or during compromises, etc.
- Valuation mandated during compromise, arrangements, etc.
- Effect of merger on minority shareholding to be disclosed.

- Listed companies to have one Director representing small shareholders.

VI. Investor Protection

- Stringent norms for acceptance of deposits from the public.
- Strengthened role of Investor Education and Protection Fund (IEPF).
- No time bar on claims of dividends from IEPF.
- Class Action Suits recognised.
- Enhanced powers to tribunal for protection of minority rights.

Companies (Amendment) Act, 2015

The Companies Act, 2013, was amended through the Companies (Amendment) Act, 2015, to facilitate business and address certain immediate concerns raised by stakeholders. These amendments along with the relevant rules have been notified and they provide exemptions under various provisions of the Act to: (i) private companies; (ii) government companies; (iii) Section 8 companies; and (iv) Nidhis.

Insolvency and Bankruptcy Code, 2016 (IBC, 2016)

The Insolvency and Bankruptcy Code, 2016 (Code), became functional from May 2016. Government of India (Allocation of Business) Rules, 1961, were amended wherein Ministry of Corporate Affairs was entrusted with the responsibility to administer the Code. The Code has been framed with the objective to consolidate and amend the laws relating to reorganisation and insolvency resolution of corporate persons, partnership firms and individuals in a time-bound manner.

Insolvency and Bankruptcy Board

The Insolvency and Bankruptcy Board of India (IBBI) was established in 2016. The IBBI has the mandate for regulation of insolvency professionals, insolvency professional agencies and information utilities besides exercising other powers and functions as envisaged under the Code.

Special Courts

Under Section 435 of the Companies Act, the Ministry of Corporate Affairs has constituted Special Courts by designating 20 existing Sessions courts/ Additional Sessions Courts as Special Courts under

Section 435 of the Companies Act, 2013 (the Act). These courts are in Maharashtra, Goa, Gujarat, Madhya Pradesh, West Bengal, Chhattisgarh, Rajasthan, Punjab, Haryana, Meghalaya, Manipur,Telangana, Andhra Pradesh, Tamil Nadu (Coimbatore), Union Territories of Jammu and Kashmir, Puducherry, Chandigarh, Andaman and Nicobar Islands, Dadra and Nagar Haveli and Daman and Diu, and NCT of Delhi.

National Company Law and Appellate Tribunal

The constitution of National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT) was done in 2016. These bodies have been constituted for faster resolution of corporate disputes and reducing the multiplicity of agencies thereby promoting 'ease of doing business' in the country. With the constitution of National Company Law Tribunal (NCLT), the Company Law Board (CLB) stands dissolved and cases pending with CLB were transferred to NCLT.

The Insolvency and Bankruptcy Code, 2016, and SICA Repeal Act, 2003, were also put in place in 2016. With this, the Board of Industrial and Financial Reconstruction (BIFR) and Appellate Authority for Industrial and Financial Reconstruction were dissolved and Benches of NCLT were designated to exercise the jurisdiction, powers and authority of Adjudicating Authority conferred by or under part II of the Insolvency and Bankruptcy Code, 2016. Central government has also notified provision for transfer of proceedings relating to arbitration, compromise, arrangements and reconstruction to the benches of NCLT. The applications pending before High Courts on winding up shall continue to be dealt by the respective High Courts and fresh applications are required to be filed before NCLT. NCLAT has its headquarters at New Delhi. At present, the NCLT has its Benches at 10 locations, viz., New Delhi, Ahmedabad, Allahabad, Bengaluru, Chandigarh, Chennai, Guwahati, Hyderabad, Kolkata and Mumbai.

The Competition Appellate Tribunal under the provisions of Competition Act was dissolved in 2017 and merged with NCLAT. The appeal against the orders of Competition Commission of India is now with NCLAT.

Companies in the Registry

Total number of companies registered in the country by October 2019, under the Companies Act, 2013, the Companies Act, 1956, and the previous company laws, stood at 19,44,336. Of these, 11,56,114 companies were active.

Corporate Social Responsibility

In India, Corporate Social Responsibility (CSR) for companies has been mandated through legislation through Section 135 of the Companies Act, 2013. Section 135, Schedule VII, of the Companies Act, 2013, and the Companies (Corporate Social Responsibility Policy) Rules, 2014, came into force from April 2014. From time to time, the Ministry has made amendments to Companies (CSR Policy) Rules, 2014, and issued clarifications and FAQs by way of circulars, so as to facilitate effective implementation of CSR and ensure its compliance.

Limited Liability Partnerships

In India, about 95 per cent of industrial units are Micro, Small and Medium Enterprises (MSMEs). As per the survey conducted by MSME, over 90 per cent of these are registered as proprietorships, about 2 to 3 per cent as partnerships and less than 2 per cent as companies. The corporate form does not appear to be widely prevalent amongst MSMEs. Analysis of the data collected by the Ministry of MSME suggests that high compliance cost under the Companies Act, 1956, deterred the MSMEs from adopting the corporate form.

The functioning of a proprietorship or a partnership firm is too opaque, making assessment of credit-worthiness by bankers difficult, and therefore, the MSME sector is at a comparative disadvantage vis-a-vis corporate bodies in accessing loan/credit facilities from banks and other financial institutions. A need was felt for a new corporate form that would provide an alternative to the traditional partnership with unlimited personal liability on the one hand, and the statute-based governance structure of the limited liability company on the other. In this context, the Limited Liability Partnership (LLP) Act was enacted in 2008 and came into force from 2009.

LLP is a form of business entity, which allows individual partners to be protected from the joint and several liabilities of partners in a partnership firm. The liability of partners incurred in the normal course of business does not extend to the personal assets of the partners. It is

capable of entering into contracts and holding property in its own name. An LLP would be able to fulfil the compliance norms with much greater ease, coupled with limitation of liability. The corporate structure of LLP and the statutory disclosure requirements are expected to enable higher access to credit in the market.

MCA21 — e-Governance Project

The Ministry operated an end-to-end e-governance project called MCA21 for end-to-end service delivery comprising Company and Limited Liability Partnership (LLP) registration, incorporation, registry and other compliance related services. The project was started in March 2006, on the Build, Own, Operate and Transfer (BOOT) Model with the vision "to introduce a service-oriented approach in the design and delivery of Government services". The project was undertaken on a Mission Mode to bring about a service-centric approach in the delivery of public services and administration of the Companies and LLP Act and it specifically focuses on: (i) speedy incorporation of companies and LLPs; and (ii) providing Ease of Doing Business. The project has been implemented in the Ministry's headquarters, all Regional Directorates and Registrar of Companies offices, to bring about a service-centric approach in timely delivery of public services and administration of Companies Act and LLP Act. All services are provided online and the filed documents are available in public domain.

With the help of e-services, the MCA21 System provides to the stakeholders a convenient, easy to use and secure access and delivers all MCA services with improved speed and certainty. It has brought about transparency, speed and efficiency in the functioning of the Ministry. After successfully launching the next generation SAP based platform version 2 of the MCA21 in March 2016, the project has embarked on to a new phase with the objective of improving it further.

Cost Audit

The companies engaged in the production of goods or providing services as specified in orders issued by the central government under Section 148 of the Companies Act, 2013, are required to include the particulars relating to the utilisation of material or labour or to other prescribed items of cost in their books of account. Such companies which are required to maintain cost records, and have a prescribed turnover are

also required to get their cost records audited by a cost accountant in practice.

The Companies (Cost Records and Audit) Rules were notified in 2014 specifying the class of companies and the threshold limit, which require to maintain cost records and conduct audit thereof. The aforesaid rules cover 6 regulated sectors and 33 non-regulated sectors which fall under the ambit of Section 148 of the Companies Act, 2013, for maintenance of cost records and conducting of audit thereof subject to the specified threshold limits. The cost records help the compilation of cost database for the own use of such companies for the purpose of cost management, pricing and other related functions. These records are also used by various government agencies like price-fixation authorities; regulatory bodies; WTO implementation and monitoring agencies; Competition Commission of India (CCI); Serious Fraud Investigation Office (SFIO); revenue authorities; and other institutions. The Ministry analyses the cost audit reports and monitors compliance to the Act/Rules by the specified companies.

Investor Education and Protection Fund

The Companies Act provides for establishment of Investor Education and Protection Fund (IEPF) for promoting Investor Awareness and protecting their interests. The amount of dividend, matured deposits, matured debentures, application money, etc., which remained unpaid/unclaimed for a period of seven years from the date they first become due for payment, are transferred to IEPF. Section 205 C of the Companies Act, 1956, did not allow the refund of such amount to individual once it is transferred to IEPF. Section 125 of Companies Act, 2013 allows refund of unpaid amounts transferred to IEPF. Such refunds are to be made by the Investor Education and Protection Fund Authority under Section 125 of the Act.

IEPF Authority was made functional from 2016. The IEPF Authority is also entrusted with the responsibilities of carrying out investor awareness activities using the amounts transferred to IEPF. Investor Awareness Programmes (lAPs) are organised in association with three professional institutes namely: (a) Institute of Chartered Accountants of India; (b) Institute of Company Secretaries of India; and (c) Institute of Cost Accountants of India. In addition, investor awareness activities like

crawler messages on Doordarshan through Prasar Bharati and airing jingles on All India Radio for a period of 90 days to create and increase investors' awareness were taken up.

Indian Corporate Law Service

Ministry of Corporate Affairs is the cadre controlling authority of the Indian Corporate Law Service (ICLS). The erstwhile Indian Company Law Service was rechristened in 2008 as the Indian Corporate Law Service.

Serious Fraud Investigation Office

The Serious Fraud Investigation Office (SFIO) was set up in 2003. The Companies Act, 2013, inter alia, has accorded statutory status to SFIO and its functions and powers have been enhanced substantially with number of enabling provisions in the Act and it was established under Section 211 of the Companies Act, 2013.

The main function of SFIO is to investigate corporate frauds of serious and complex nature. It takes up investigation of frauds characterised by complexity, and having inter-departmental and multi-disciplinary ramifications, substantial involvement of public interest to be judged by size of either monetary appropriation or the number of persons affected and the possibility of investigations leading to, or contributing towards a clear improvement in systems, laws or procedures. Investigations are carried out by a multi-disciplinary team which includes experts from the field of accountancy, forensic auditing, taxation, customs and central excise, information technology, capital market, financial transaction (including banking) and enforcement agencies like Central Bureau of Investigation (CBI), Intelligence Bureau (IB) and Enforcement Directorate.

Indian Institute of Corporate Affairs

The Ministry set up the Indian Institute of Corporate Affairs (IICA), a society registered under Societies Registration Act, 1860, to serve as a 'Holistic Think-Tank', and a 'Capacity Building, Service Delivery Institution' to help corporate growth, reforms through synergised knowledge management, partnerships and problem solving in a one-stop-shop mode. The Institute fulfils the training needs of the officers of the

Indian Corporate Law Service (ICLS), and other officials working for the Ministry, corporates, PSUs and banks through its network of various schools and centres. National Foundation for Corporate Social Responsibility is also anchored with IICA. It also helps in the continuous improvement of service delivery mechanisms in diverse areas like corporate governance, corporate social responsibility, investor education and protection, business responsibility, finance, competition law, etc.

Website: www.iica.in

Competition Commission of India

The Competition Commission of India (CCI) was established in 2003 under the Competition Act, 2002, with the objective of eliminating practices having an adverse effect on competition, promoting and sustaining competition, protecting the interest of consumers and ensuring freedom of trade in India. The Competition Act, 2002 was amended twice (Amendment) Act, 2007 and the Government (Amendment) Act, 2009. The provisions of the Competition (Amendment), 2002, relating to anti-competitive agreements and abuse of dominant position were brought into force in 2009 and those relating to combinations, from 2011.

By March 2017, the CCI received 868 matters relating to anti-competitive agreements and abuse of dominance in diverse sectors such as insurance, travel, transport, cement, automobile manufacture, real estate, pharmaceuticals, financial sector, public procurement, entertainment, etc. It passed final orders in 654 cases (about 75.34 per cent). Penalties were also imposed by CCI in some of the serious cases of infringements.

In respect of Regulation of Combinations, the Commission received 498 notices (including 9 suo-motu cases) for combination till March 2017. Out of them, 482 cases were disposed of within the stipulated time period.

Website: www.cci.gov.in

15 Food, Civil Supplies and Consumer Affairs

THE Ministry of Consumer Affairs, Food and Public Distribution, is a ministry with two departments - the Department of Food and Public Distribution and the Department of Consumer Affairs. Department of Consumer Affairs (DCA), one of the two departments under the Ministry, was constituted as a separate department in June 1997 as it was considered necessary to have a separate department to give a fillip to the nascent consumer movement in the country.

The Department has been entrusted with the following work: internal trade; the Essential Commodities Act, 1955, etc.; Prevention of Black Marketing and Maintenance of Supply of Essential Commodities Act, 1980; regulation of packaged commodities; training in legal metrology; consumer cooperatives, etc., to name a few.

The Department of Food and Public Distribution, in the Ministry is responsible for management of the food economy of the nation. It undertakes various activities, such as procurement of food items, their storage, movement and delivery to the distributing agencies. The primary policy objective of the Department is to ensure food security for the country through timely and efficient procurement and distribution of foodgrains. This involves procurement of various foodgrains, building up and maintenance of food stocks, their storage, movement and delivery to the distributing agencies and monitoring of production, stock and price levels of foodgrains.

The focus is on incentivising farmers through fair value of their produce by way of Minimum Support Price mechanism, distribution of food grains to Below Poverty Line (BPL) families; covering poor households at the risk of hunger under Antyodaya Anna Yojana (AAY); establishing grain banks in food-scarce areas; and involvement of Panchayati Raj Institutions (PRI) in Public Distribution System (PDS).

Websites: www.consumeraffairs.nic.in www.dfpd.nic.in

Consumer Affairs

The mandate of the Department of Consumer Affairs (DCA) is consumer advocacy. India was a pioneer in consumer advocacy with the Consumer Protection Act (CPA), a path-breaking legislation at the time, enacted in 1986 and the establishment of a separate government department dedicated to consumer affairs as early as in 1997. Translating this mandate into action entails: enabling consumers to make informed choices; ensuring fair, equitable and consistent outcomes for consumers; and facilitating timely and effective consumer grievance redress.

Consumer Awareness

The Department has been conducting a countrywide multimedia awareness campaign since 2005 on various issues related to consumer rights and responsibilities across diverse subjects. "Jago Grahak Jago" has today become a household axiom. More recently, joint publicity campaigns have been launched in partnership with the related government departments/organisations that deal with a mass consumer clientele. For instance, on food, with the Food Safety and Standards Authority of India (FSSAI); on financial services with the Reserve Bank of India (RBI); and on medicines with the National Pharmaceutical Pricing Authority (NPPA) through various electronic and print media such as television, radio, newspapers and outdoor advertising. The consumer awareness campaign is implemented through the Directorate of Audio and Visual Publicity (DAVP), the Doordarshan Network (DD) and the All India Radio (AIR) of Ministry of Information and Broadcasting.

Consumer Welfare Fund

The Central Excise and Salt Act, 1944, was amended in 1991 to enable the central government to create a Consumer Welfare Fund into which unclaimed central excise revenues not refundable to the manufacturers would be credited annually. The Consumer Welfare Fund was created in 1992 with the objective of providing financial assistance to promote and protect the welfare of the consumer, create consumer awareness and strengthen the voluntary consumer movement in the country, particularly in rural areas. The Department of Consumer Affairs operates the fund, set up by the Department of Revenue under the Central Excise and Salt Act, 1944. Under its Rules, since revised in 2014, any agencies/ organisations

engaged in consumer welfare activities for at least a period of five years and registered under the Companies Act, Societies Registration Act, Cooperative Societies Actor any other law for the time being in force, are eligible for financial assistance from the Fund.

Commitment to Consumers

The DCA seeks to empower consumers through awareness and education; enhance consumer protection through prevention of unfair trade practices; enable quality assurance and safety through standards and their conformity; and ensure access to an affordable and effective grievance redress mechanism. Consumer markets for goods and services have undergone profound transformation since the enactment of the Consumer Protection Act in 1986. Liberalisation, privatisation and deregulation; innovations in new technologies and products; the growth of new consumer services; and the rising aspirations of the consumers for better goods and services have been the major drivers of change. The modern marketplace contains a plethora of increasingly complex products and services. The emergence of global supply chains, rise in international trade and the rapid development of e-commerce have led to new delivery systems for goods and services and have provided new opportunities for consumers. Equally, this has rendered the consumer vulnerable to new forms of unfair trade and unethical business practices. Addressing these challenges requires policy coherence; coordinated programme implementation; harmonisation of regulatory action and an institutional mechanism by which the interventions of government produce optimal results. Taking the benefits of good governance to the common citizen has been the primary focus of the Department. This is done in partnership with multiple stakeholders, relevant line departments of the Government of India, state governments, regulatory agencies, and voluntary consumer organisations.

Consumer Protection Act, 1986

A key milestone in consumer advocacy in the country was the enactment of Consumer Protection Act, 1986. This Act provided the legislative framework to better protect the interests of the consumer by creating a formal but quasi-judicial dispute resolution mechanism exclusively for consumers. This progressive legislation established the

three-tier quasi-judicial consumer dispute redress machinery at the national, state and district levels aimed at providing simple, speedy and affordable redress to consumers.

Consumer Protection Act, 2019

The Consumer Protection Act, 2019 (New Act) became effective from August 2019. The salient features of the Act, include, establishment of Central Consumer Protection Authority (CCPA) to: (a) protect, promote and enforce the rights of consumers as a class, and prevent violation of consumers' rights under this Act; (b) prevent unfair trade practices and ensure that no person engages in unfair trade practices; (c) ensure that no false or misleading advertisement is made of any goods or services which contravenes the provisions of this Act or the rules or regulations made thereunder; and (d) ensure that no person takes part in the publication of any advertisement which is false or misleading.

Bureau of Indian Standards

A new Bureau of Indian Standards (BIS) Act 2016 came into force from 2017. The Act establishes the Bureau of Indian Standards (BIS) as the National Standards Body of India. It has enabling provisions for the government to bring under compulsory certification regime any goods or article of any scheduled industry, process, system or service which it considers necessary in the public interest or for the protection of human, animal or plant health, safety of the environment, or prevention of unfair trade practices, or national security. Enabling provisions have also been made for making hallmarking of the precious metal articles mandatory. The new Act also allows multiple type of simplified conformity assessment schemes including self-declaration of conformity against a standard which will give simplified options to manufacturers to adhere to the standards and get certificate of conformity. The Act enables the central government to appoint any authority/agency, in addition to the BIS, to verify the conformity of products and services to a standard and issue certificate of conformity. Further, there is provision for repair or recall, including product liability of the products bearing Standard Mark but not conforming to the relevant Indian Standard. The new Act will further help in ease of doing business in the country, give fillip to "Make In India" campaign and ensure availability of quality products and

services to the consumers. Bureau of Indian Standards Rules were also notified in 2017.

The Bureau of Indian Standards was set up as a statutory organisation taking over the assets and liabilities of the Indian Standards Institution (ISI) that came into existence in 1947. The Bureau has its headquarters in New Delhi. It has a network of 5 regional offices, 32 branch offices and 8 laboratories which act as effective link between BIS, government, industry and consumers. The Bureau has made steady progress in the various fields of its key activities namely standards formulation, product certification, management system certification and hallmarking.

Website: www.bis.gov.in

National Consumer Helpline

National Consumer Helpline (NCH) is a project that operates under the Centre for Consumer Studies at Indian Institute of Public Administration (IIPA). It was set up in 2004 and has customised software, which is server based for receiving calls and answering through one PRI line. The Project recognises the need of consumers for a Telephone Helpline to deal with multitude of problems arising in their day-to-day dealings with business and service providers. Its primary objective is to attend to the telephone calls from consumers and provide information to the callers and register their complaints in the INGRAM portal; to provide advice and counseling to consumers for redressal of their grievances; handle the complaints received online through the INGRAM portal, emails, sms, etc.; to assist/guide the consumers in registering their complaints in the appropriate consumer fora; to perform backend operations, etc. National Consumer Helpline (NCH) is the core of the consumer grievance redressal mechanism. It does not work as Call Centre alone. It has partnered with 373 companies that respond online to resolve complaints. This is called convergence mechanism. It also pursues the complaints with the convergence companies, takes feedback from the complainants, does research and analysis of the complaint. NCH provides a National Toll Free No-1800-11 -4000. SMS can also be sent to +918130009809 (charges apply) mentioning the name and city. A consumer can call to seek information, advice or guidance for his queries and complaints.

Consumer Grievance Redress

Under the Consumer Protection Act, 1986, a three-tier quasi-judicial mechanism has been set up in the country to adjudicate complaints filed before them and to provide speedy redress to consumers. This includes the National Consumer Disputes Redressal Commission (National Commission) at the apex level with territorial jurisdiction over the whole country and pecuniary jurisdiction to consider consumer disputes/complaints involving claims above ₹ 1 crore and with appellate jurisdiction over state/commissions; 35 state consumer disputes redressal commissions (state commissions) with territorial jurisdiction over the state/ UT concerned and financial jurisdiction to entertain consumer complaints involving claims above ₹ 20 lakh and up to ₹ 1 crore and with appellate jurisdiction over the district for a and 679 District Consumer Disputes Redressal For a (district forum) with territorial jurisdiction over the district and pecuniary jurisdiction up to ₹ 20 lakh.

National Test House

The National Test House (NTH) is a premier test and quality evaluation laboratory for industrial, engineering and consumer products under the administrative control of the Government of India since the year 1912. This century-old scientific and technological organisation was established originally by the Indian Railway Board as a captive test and quality evaluation laboratory (originally known as Government Test House) at Alipore, Kolkata with a view to examine the quality of the various products meant to be used by the Indian Railways. The first regional laboratory was set up by NTH in Mumbai in 1963 and subsequently at Chennai (1975), Ghaziabad (1977), Jaipur (1994) and Guwahati (1996). The National Test House works in the field of testing, evaluation and quality control of various engineering materials and finished products, calibration of measuring equipment/ instruments and devices. To be precise, the NTH issues test certificates in scientific and engineering fields to certify conformity to national/international specifications or customer standard specifications.

Price Monitoring

The DCA operates a Price Monitoring Cell (PMC) tasked with monitoring prices of select essential commodities. The monitoring is done in respect of both retail and wholesale prices on a daily basis. The Cell monitors the prices of 22 essential commodities, which include

cereals, pulses, vegetables, edible oils, sugar, milk, etc., collected from 71 reporting centres across the country through the Civil Supplies Department of states/UTs. These daily commodity prices are available on the Departmental website and are updated regularly.

The prevailing price situation as well as the other factors that impact prices, both in the domestic and the international markets, are analysed and brought to the notice of the interministerial consultation mechanism for appropriate policy action. Based on the analysis of price data received, specific interventions are undertaken including allowing import of various items of mass consumption at zero or concessional import duties; restriction on exports, when necessary; prescribing stock holding limits under Essential Commodities Act; and allocation of foodgrains at affordable prices under the Targeted Public Distribution System (TPDS). The DCA is working on increasing the number of reporting centres from 71 at present to 100 in a phased manner, enhancing coordination with states/ UTs to make price monitoring more effective; expanding the list of essential commodities currently monitoring keeping in view the changing consumption pattern through periodical market surveys; commodity specific research on consumption pattern through periodical market surveys; commodity specific research studies/ surveys such as demand-supply; and consumption pattern analysis of essential food items to facilitate appropriate policy intervention.

Food and Public Distribution

The primary objective of the Department of Food & Public Distribution is to ensure food security for the country through: efficient procurement at Minimum Support Price (MSP), storage and distribution of foodgrains; ensuring availability of foodgrains, sugar and edible oils through appropriate policy instruments; including maintenance of buffer stocks of foodgrains; and making foodgrains accessible at reasonable prices, especially to the weaker and vulnerable sections of society under a Targeted Public Distribution System (TPDS).

The main instruments of the Department's food management policy are procurement, storage and movement of foodgrains, public distribution and maintenance of buffer stocks.

Procurement of Foodgrains

Food Corporation of India

The Food Corporation of India (FCI) is a statutory body under the Ministry of Consumer Affairs, Food and Public Distribution, formed by the enactment of Food Corporation Act 1964. FCI has been divided into 5 zones, viz., north, south, east, west and north-east with a zonal office in each zone.

It was set up to implement the following objectives of the National Food Policy: (i) effective price support operations for safeguarding the interests of the poor farmers; (ii) distribution of foodgrains throughout the country for Public Distribution System (PDS); (iii) maintaining a satisfactory level of operational and buffer stocks of foodgrains to ensure National Food Security; and (iv) regulate market price to provide foodgrains to consumers at a reliable price.

FCI, with the help of state government agencies, procures wheat, paddy and coarse grains in various states in order to provide price support to the farmers. Before each Rabi/Kharif crop season, central government announces the Minimum Support Prices (MSP), based on the recommendations of Commission for Agricultural Costs and Prices (CACP), which takes into consideration the cost of various agricultural inputs and the reasonable margin for the farmers for their produce. Details of the number of procurement centres to be opened and arrangements like purchase of packaging material and storage space are also kept in line. Sufficient numbers of procurement centres are opened by FCI/state government agencies in mutual consultation before onset of procurement season, keeping in view the procurement potential and geographical spread of the state concerned. Review is made from time to time on the need for additional procurement centres, if any, during the procurement season and required additional procurement centres are also opened. State governments are encouraged to adopt decentralised procurement (DCP) system of procurement so as to maximise procurement, reduce transportation and increase the reach of MSP operations. Under this system, state governments undertake procurement and distribution of foodgrains by themselves. Procured quantities in excess of state's requirement are taken in the Central Pool for distribution elsewhere.

With the substantial increase in production of foodgrains in recent years and with an emphasis on bringing Green Revolution in Eastern India, the procurement operations have expanded to many states due to which accumulated Central Pool Stock of foodgrains had reached to a record level of 805.16 lakh tonnes in 2012 against the buffer norm of 319 lakh tonnes. Therefore, a balanced policy approach for procurement, distribution and disposal of foodgrains is now being adopted to provide adequate price support to the farmers, to have optimum level of procurement for meeting TPDS requirement, maintaining buffer stock and to dispose off surpluses without distorting the market in future.

Website : www.fci.gov.in

Stock in Central Pool

Foodgrain Stocking Norms (Buffer Norms) were laid down to meet the prescribed minimum stocking norms for food security, to ensure monthly release of foodgrains for the Targeted Public Distribution System (TPDS), Other Welfare Schemes (OWS), to meet emergency situations arising out of unexpected crop failure, natural disasters, festivals, etc., and to use the foodgrain stock in the Central Pool for market intervention to augment supply so as to help moderate the open market prices.

Food Subsidy

States are allocated foodgrains at subsidised rates under the National Food Security Act, 2013 (NFSA) and other welfare schemes. Difference between Economic Cost and Central Issue Price (CIP) at which foodgrains are issued to states are reimbursed to Food Corporation of India (FCI) as subsidy. In case of states which have adopted Decentralised Procurement Scheme (DCP), food subsidy is released to states by Government of India for quantity of foodgrains procured and distributed by them under NFSA and other welfare schemes.

National Food Security

In order to further strengthen the commitment to food security of the people, Government of India enacted the National Food Security Act, 2013 (NFSA), which came into force in 2013. The Act aims to provide for food and nutritional security in human life cycle approach, by

ensuring access to adequate quantity of quality food at affordable prices to people to live with dignity. The Act marks a paradigm shift in approach to food security— from welfare to a rights based one.

The Act provides for coverage of up to 75 per cent of the rural population and up to 50 per cent of the urban population for receiving subsidised foodgrains under Targeted Public Distribution System, thus covering about two-thirds of the population. This coverage for receiving highly subsidised foodgrains is under two categories—households covered under the Antyodaya Anna Yojana (AAY) and the remaining households as priority households. AAY was launched in 2000 to provide focus on food security to the poorest of the poor, and covers 2.5 crore households. Such households are entitled under the Act to receive 35 kg. of foodgrains per households per month, at ₹ 1/2/3 per kg. for coarse grains/wheat/rice. Priority household are entitled to receive 5 kg. of foodgrains per person per month at the above mentioned highly subsidised prices.

The Act also contains provisions for setting up of grievance redressal mechanism at the district and state levels. Separate provisions have also been made for ensuring transparency and accountability.

NFSA is now being implemented in all the states/UTs covering about 80.55 crore beneficiaries, against the intended coverage of 81.34 crore people. In Chandigarh, Puducherry and urban areas of Dadra and Nagar Haveli, the Act is being implemented in the cash transfer mode under which food subsidy is being transferred into the bank accounts of beneficiaries who then have a choice to buy foodgrains from open market.

End-to-End Computerisation

Under Targeted Public Distribution System (TPDS) reforms, the Department in collaboration with all state/UT governments had implemented a Plan scheme on 'End-to-End Computerisation of TPDS Operations' to introduce transparency and efficiency in the TPDS operations all over the country. Such reforms became even more relevant after coming into force of National Food Security Act, 2013 (NFSA). The implementation of the scheme was initiated by the Department under the 12th Five Year Plan and its validity was extended up to March 2020, which encompassed the implementation of following major activities in

all states/ UTs: (a) digitization of beneficiary database to enable correct inclusion/exclusion of beneficiaries; for better targeting of food subsidies; (b) computerisation of Supply Chain Management for efficient allocation and management of foodgrains up to the fair price shops; and (c) online grievance redressal system including toll free helplines to introduce greater public accountability in TPDS operations. Besides, all states/UTs are also seeding Aadhaar numbers of beneficiaries with their ration cards and installing electronic Point of Sale (ePoS) devices at the Fair Price Shops (FPSs) for electronic record keeping of sale transaction at FPSs on portals and enabling biometric/Aadhaar authentication of transactions for rightful targeting of foodgains to genuinely eligible beneficiaries in a transparent manner.

As part of these efforts, all 23.5 crore ration cards under NFSA in the country are completely digitised and so far, about 90 per cent ration cards are also seeded with Aadhaar numbers of beneficiaries. Further, more than 90 per cent of total 5.4 lakh FPSs in the country are having ePoS devices for transparent distribution of subsidised foodgrains and are presently recording delivery of over 60 per cent foodgrains through biometrically authenticated transactions by beneficiaries on a monthly basis.

Integrated Management of Public Distribution System

The Department with an objective to sustain the technology-led TPDS reforms and to introduce new reforms, had started the implementation of a Central Sector Scheme, namely Integrated Management of Public Distribution System (IM-PDS) in association with all states/UTs from 2018. The main objective of this scheme is to implement nation-wide portability ration cards under NFSA, i.e., eligible ration card holders covered under the Act, get an option to lift their entitled foodgrains from any Fair Price Shop (FPS) of their choice anywhere in the country by using their existing/same ration card after biometric/Aadhaar authentication on an ePoS device through 'One Nation One Ration Card' plan. The validity of the scheme has been extended up to March 2022.

This facility is highly beneficial to numerous migratory beneficiaries such as labourers, daily-wagers, blue-collar workers, etc., who frequently change their place of dwelling in search of temporary employment or for other reasons all over the country, who otherwise get deprived of their

food security entitlements due to migration outside their native villages/towns/districts where their ration cards are tagged to particular FPSs. Under One Nation One Ration Card system, the migrant beneficiaries are able to access their quota of subsidised foodgrains as per the scale and central issue prices prescribed under the NFSA i.e., 35 kg per Antyodaya Anna Yojana (AAY) family per month and 5 kg per priority household person per month at the rates of ₹ 3, 2, 1 per kg for rice, wheat, coarse-grains respectively.

As on September 1, 2020, the facility of national portability under One Nation One Ration Card is seamlessly enabled in 26 states/UTs, namely, Andhra Pradesh, Bihar, Dadra, Nagar Haveli and Daman and Diu, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Karnataka, Madhya Pradesh, Mizoram, Maharashtra, Odisha, Sikkim, Rajasthan, Punjab, Telangana, Tripura, Uttar Pradesh, Jammu and Kashmir, Uttarakhand, Nagaland, Manipur, Ladakh and Lakshadweep covering nearly 65 crore beneficiaries (80 per cent of total NFSA population in the country) who now have an option to lift their entitled foodgrains from any FPS of their choice. Further, constant efforts are being made to expand the reach of One Nation One Ration Card to the beneficiaries of remaining states/ UTs depending upon the readiness of respective state/UT governments.

Other Welfare Schemes

Mid-Day Meal Scheme

The Mid-Day Meal Scheme is implemented by the Ministry of Education. The Scheme covers students of primary and upper primary classes in the government schools/schools aided by government and the schools run by local bodies. Foodgrains are supplied free-of-cost at 100 grams for primary stage and at 150 grams for upper primary stage per child per school day where cooked/processed hot meal is being served or 3 kgs per student per month where raw foodgrains are distributed.

Wheat Based Nutrition Programme

This Scheme is implemented by the Ministry of Women and Child Development. The foodgrains allotted under it are utilised by the states/UTs under Integrated Child Development Services (ICDS) scheme

for providing nutritious/energy food to children in the age group of 0-6 years and expectant/ lactating women.

Scheme for Adolescent Girls

The Ministry of Women and Child Development administers the scheme at the central level. However foodgrains for the Scheme are allotted by the Department of Food and Public Distribution at BPL rates to the Ministry of Women and Child Development. The SABLA scheme was launched in 2010 by merging two schemes namely, Nutrition Programme and Adolescent Girls (NPAG) and Kishori Shakti Yojana (KSY) into a single scheme. The Scheme aims at empowering adolescent girls of 11-18 years by improving their nutritional and health status and upgrading various skills useful to them. It also aims at equipping the girls on family welfare, health hygiene, etc., and guiding them on existing public services. The requirement of foodgrains for nutrition is at 100 grams of grains per beneficiary per day for 300 days in a year.

Supply of Foodgrains to Welfare Institutions

With a view to meeting the requirement of welfare institutions, viz., charitable institutions such as beggar homes, nariniketans and other similar welfare institutions not covered under TPDS or under any other welfare schemes, an additional allocation of foodgrains (rice and wheat) not exceeding 5 per cent of the BPL allocation is made to states/UTs at BPL prices.

Supply of Foodgrains for SC/ST/OBC Hostels

This Scheme was introduced in 1994. The residents of the hostels having 2/3rd resident students belonging to SC/ST/OBC are eligible to get 15 kg foodgrains per resident per month. Allocations of foodgrains under it are made by the Department of Food and Public Distribution based on the requests received from the state/UT governments.

Annapurna Scheme

This Scheme is implemented by the Ministry of Rural Development. Indigent senior citizens of 65 years of age or above, who are not getting pension under the National Old Age Pension Scheme (NOAPS), are provided 10 kgs. of foodgrains per person per month free-of-cost under it. Foodgrains are provided by the Department of Food and Public Distribution under the scheme at BPL prices.

Open Market Sale Scheme (Domestic)

In addition to maintaining buffer stocks and for meeting the requirement of the Targeted Public Distribution System (TPDS) and Other Welfare Schemes (OWS), the FCI sells excess stocks of wheat and rice from the Central Pool at pre-determined prices in the open market from time to time under Open Market Sale Scheme (Domestic) through e-tender to enhance the supply especially during the lean season especially in the deficit regions.

Storage of Foodgrains

Capacity of FCI and State Agencies

FCI has its own grid of covered godowns in all states to safely stock the central pool foodgrains. In addition, it hires capacity from Central Warehousing Corporation (CWC) and state agencies like state warehousing corporations as well as private parties. In August 2020, the total storage capacity available with FCI and state agencies including covered and plinth storage is 816.89 LMT against the stock of 700.27 LMT.

Augmentation of Storage Capacity

In order to cope with increasing production and procurement of foodgrains, the Department is implementing private entrepreneurs guarantee (PEG) scheme for augmenting the covered storage capacity in the country. Under the PEG scheme, which was launched in 2008, godowns are constructed in PPP mode and the land and construction cost is borne by the selected partners. FCI on its part guarantees 10-year usage of storage capacities to the private investors and 9 years to CWC and SWCs. Locations for construction of godown are identified by the FCI on the basis of recommendations of state-level committees to cover the gaps in storage. For consuming areas, the storage gap is assessed on the basis of the 4 months' requirement of PDS and OWS while for procuring states the storage gap has been assessed based on the highest stock levels in the last three years, and keeping in view the potential of procurement. Under the scheme, a capacity of total 143.91 MT was completed out of total sanctioned capacity of 152.40 lakh MT by August 2020.

As a part of the modernisation of storage facilities, modern storage facilities in the form of steel silos are also being created in Public Private Partnership. Each silo will have capacity of 25,000 or 50,000 MT. This will mechanise the existing supply chain and improve operational efficiency.

A central sector scheme for construction of godowns with focus on augmenting storage capacity is being implemented in the North-Eastern state. Under it, funds are also provided for construction of storage godowns to improve the supply chain logistics of PDS.

Warehousing Development and Regulatory Authority

For the growth and development of warehousing sector, to bring reforms in the agricultural marketing and to increase credit flow in the farm sector, the government introduced a negotiable warehouse receipt system in the country by enacting the Warehousing (Development and Regulation) Act, 2007, which is in place since 2010. The government constituted the Warehousing Development and Regulatory Authority (WDRA) in 2010 for implementation of the provisions of the Act. The Negotiable Warehouse Receipts (NWRs) issued against stocks of farm produces deposited by the farmers in warehouses would help the farmers in seeking loan from banks. It would help overcoming the situation of distress sale of agricultural commodities by the farmers during peak harvest season. Warehouses need to be registered with the WDRA for issuing NWRs. The warehouses are inspected by the empanelled inspection agencies prior to grant of registration to ensure that basic requirements of scientific and safe storage of agricultural and other commodities are fully met by the warehouses.

The Authority has notified 123 agricultural commodities including cereals, pulses, oilseeds, spices, vegetable oils, edible nuts and other commodities like rubber, tobacco, tea, coffee, makhana, etc., and 26 horticultural commodities such as potato, dehydrated onion, garlic, ginger, turmeric, apple and resins for issuance of NWRs.

Central Warehousing Corporation

Central Warehousing Corporation (CWC) is a Public Sector Undertaking (PSU) set up in 1957 under this Department to provide

scientific storage facilities for agricultural produces, implements and other notified commodities. By August 2020, CWC was operating 419 warehouses with a total storage capacity of 117 lakh MT. The capacity includes 39 bonded units; 25 Container Freight Station (CFSs) / Inland Clearance Depots (ICDs); two air cargo complexes at Goa and IGI Delhi; one temperature controlled unit at Vashi (Maharashtra); two Integrated Check Posts (ICPs) at Attari (Punjab) and Petrapole (West Bengal) for providing services to import/export trade. CWC had 19 associate State Warehousing Corporations (SWCs), total number of warehouses 2,282 and with a total capacity of 415.86 lakh MT in August 2020.

CWC also has a 100 per cent owned subsidiary company, namely, Central Railside Warehouse Company Limited (CRWC) for development of Railside Warehouse Complexes (RWCs).

Post Harvest Management of Foodgrains

Quality Standard for Foodgrains

The government exercises due control over the quality of foodgrains procured for the central pool. The Quality Control Cells of the Ministry at New Delhi and the field offices at Bengaluru, Bhopal, Bhubaneshwar, Kolkata, Hyderabad, Lucknow, Pune, Guwahati, Chennai and Patna monitor the quality of foodgrains procured, stored and issued for distribution by FCI and state governments and their agencies.

Indian Grain Storage Management and Research Institute

Indian Grain Storage Management and Research Institute (IGMRI), Hapur, and its field stations at Ludhiana (Punjab) and Hyderabad (Andhra Pradesh) are engaged in the training and applied Research and Development (R&D) work relating to grain storage management. The IGMRI also conducts various training courses on storage, inspection of foodgrains, pest control, etc., for the officers of storage agencies and pest control operators, etc.

Central Grain Analysis Laboratory

The Central Grain Analysis Laboratory (CGAL) located in New Delhi assists the Department in monitoring the quality of foodgrains at the time of procurement, storage and distribution by analysing samples collected by quality control officers.

Export and Import of Foodgrains

Export Policy of Rice and Wheat

The government has allowed free export of non-basmati rice by private parties from privately held stocks from 2011. State Trading Enterprises (STEs) including M/s NCCF and NAFED are also permitted to export privately held stocks on non-basmati rice. Export of wheat was also allowed from the same year. Export of non-basmati rice and wheat is permitted through Custom EDI ports. Export is also permitted through the non-EDI Land Custom Stations (LCS) on Indo-Bangladesh and Indo-Nepal Border subject to registration of quantity with DGFT. Export of rice of seed quality and other [rice in husk (paddy or rough) other than seed quality] is permitted under licence.

However, needs driven humanitarian assistance in the form of Grant-in-Aid to the deserving countries, is only allowed. Since January 2020 onwards, 600 MT of non-basmati rice to Madagascar and 53,004 MT of wheat to Afghanistan was supplied as humanitarian assistance from Central Pool Stocks of FCI, through Ministry of External Affairs. In 2020, for the very first time, 2,000 MT of non-basmati rice was supplied to Bhutan from the SAARC Food Bank to help tide over difficulties faced due to Covid-19.

Sugar

Sugar Production

Sugar industry is an important agro-based industry that impacts rural livelihood of about 50 million sugarcane farmers and their families and around 5 lakh workers directly employed in sugar mills. Employment is also generated in various ancillary activities relating to transport, trade servicing of machinery and supply of agriculture inputs. India is the second largest producer of sugar in the world after Brazil and is also the largest consumer. Today, Indian sugar industry's annual output is worth approximately ₹ 80,000 crore.

There are 747 installed sugar factories in the country as on August 31, 2020, with sufficient crushing capacity to produce around 345 lakh MT of sugar. The capacity is roughly distributed equally between private sector units and cooperative sector units. The capacity of sugar mills is,

by and large, in the range of 2,500 Ton of Cane Daily (TCD) to 5,000 TCD bracket, but increasingly expanding and going even beyond 10,000 TCD. Two stand-alone refineries have also been established in the country in the coastal belt of Gujarat and West Bengal which produce refined sugar mainly from imported raw sugar as also from indigenously produced raw sugar.

Export of Sugar

Sugar is an essential commodity. Its sales, delivery from mills, and distribution were regulated under EC Act, 1955. Till 1997, the exports of sugar were being carried out under the provisions of the Sugar Export Promotion Act, 1958, through the notified export agencies, viz., Indian Sugar and General Industry Export Import Corporation Ltd. (ISGIEIC) and State Trading Corporation of India Ltd. (STC).

Import of Sugar

Import of sugar, which was placed under OGL with zero duty in 1994, continued with zero duty upto 1999. The government imposed a basic customs duty of 5 per cent and a countervailing duty of ₹ 850.00 per MT on imported sugar from 1998. The basic custom duty was increased from 5 per cent to 20 per cent from I999 in addition to the countervailing duty. In the Union Budget for 1999-2000, duty on imported sugar was further increased from 20 per cent to 25 per cent with surcharge of 10 per cent.

Review of Distribution of Sugar to Antyodaya Anna Yojana Families

Sugar was distributed through the Targeted Public Distribution System (TPDS) by the states/UTs at subsidised prices for which the central government was reimbursing ₹ 18.50 per kg of sugar distributed by the participating state governments/UT administrations. The scheme was covering all BPL population of the country as per 2001 Census and all the population of the north-eastern states/special category/hilly states and island territories. The National Food Security Act, 2013 (NFSA) is now being universally implemented by 36 states/UTs. Under the NFSA, there is no identified category of BPL; however, the Antyodaya Anna Yojana (AAY) beneficiaries are clearly identified. The Sugar Subsidy Scheme has been reviewed and it has been decided that it is imperative to give access to consumption of sugar as a source of energy in diet, for the poorest of the poor section of the society, i.e., AAY families.

Accordingly, the government has decided that the existing system of sugar distribution through PDS may be continued as per the following: (i) the existing scheme of supply of subsidised sugar through PDS may be continued for restricted coverage of AAY families only. They will be provided 1 kg of sugar per family per month; and (ii) the current level of subsidy at ₹ 18.50 per kg provided by the central government to states/UTs may be continued for the AAY population. The revised scheme was implemented in 2017. Twelve states participated during 2017-18 and ₹ 300 crore was released as subsidy under it.

Ethanol Blending Petrol Programme

Ethanol is an agro-based product, mainly produced from a by-product of the sugar industry, namely molasses. In years of surplus production of sugarcane, when prices are depressed, the sugar industry is unable to make timely payment of cane price to farmers. The Ethanol Blended Petrol Programme (EBP) seeks to achieve blending of ethanol with motor sprit with a view to reducing pollution, conserve foreign exchange and increase value addition in the sugar industry enabling them to clear cane price arrears of farmers.

Government has also notified new National Policy on Bio-Fuels, 2018, under which sugarcane juice has been allowed for production of ethanol. Further with a view to support sugar sector and in the interest of sugarcane farmers, the government has fixed the remunerative ex-mill price of ethanol derived from C-heavy at ₹ 43.46/litre. For the first time, the government has also fixed ex-mill price of ethanol derived from B-heavy molasses/partial sugarcane juice at ₹ 52.43/litre and from 100 per cent sugarcane juice at ₹ 59.13 per litre for those mills who will divert sugarcane juice for production of ethanol thereby not producing any sugar. In the ethanol season 2017-18, agreement was signed for supply of 164 crore litres.

Sugar Development Fund

Under the Sugar Cess Act, 1982, a cess was collected as excise duty on all sugar produced and sold by any factory within the counrty which has now been abolished through Taxation Laws Amendment Act, 2017. The cess so collected provided funds for Sugar Development Fund (SDF) through budgetary process. The Sugar Development Fund Act, 1982, can

be utilised by the Government of India for making loans for facilitating the rehabilitation and modernisation; development of sugarcane; bagasse based co-generation power projects; production of anhydrous alcohol or ethanol from alcohol; conversion of existing ethanol plant into zero liquid discharge plant; making grants for any research project aimed at development of sugar industry; defraying expenditure for the purpose of building up and maintenance of buffer stock of sugar; internal transport and freight charges to the sugar factories on export shipments of sugar; financial assistance to sugar factories towards interest on loan given in terms of any scheme approved by the central government from time to time; marketing and promotion service for raw production; interest subvention on scheme for extending soft loan to sugar mills; production subsidy to sugar mills to offset cost of cane; and facilitate timely payment of cane price dues to farmers and for defraying any other expenditure for the purpose of this Act.

National Sugar Institute, Kanpur

Established in 1936, National Sugar Institute, Kanpur, India has contributed immensely in the growth and development of the sugar industry not only in India but in many sugar producing countries across the globe. With an aim to serve the sugar and alied industries, the Institute conducts regular courses in sugar technology; sugar engineering; alcohol technology; quality control; pan boiling; instrumentation and automation; and sugarcane productivity related disciplines. However, upon request and otherwise also, it conducts short duration refresher courses and training programme on multiple topics.

In addition, the Institute undertakes research work on important issues before the sugar industry and has many patents to its credit. Another major area of activity is consultancy and the Institute caters to the needs of more than 100 sugar factories and distilleries annually across the globe.

Edible Oils

Edible oils and fats are essential ingredients for a wholesome and balanced diet and are vital items of mass consumption. The Department of Food and Public Distribution deals with issues related to the vegetable oil processing industries, price control, inter-state trade and commerce

and also supply and distribution of vanaspati, oilseeds, vegetable oil, cakes and fats. The Directorate of Sugar and Vegetable Oils is staffed with qualified technical people who assist the Ministry in the coordinated management of Vegetable Oils Policy, particularly relating to production/ availability and monitoring of prices.

International Cooperation

India is associated with a number of international agencies working in the field of food-related matters. These include World Food Programme (WFP), SAARC Food Bank, Food and Agricultural Organisation (FAO), International Grains Council (IGC) and International Sugar Organisation (ISO), etc.

SAARC Food Bank

In pursuance of the decision taken in the 14th SAARC Summit held in New Delhi in 2007, the Heads of States of South Asian Association for Regional Cooperation (SAARC) countries signed the agreement to establish the SAARC Food Bank. The Food Bank will supplement national efforts to provide food security to the people of the region. As per this agreement, SAARC Food Bank is to have a reserve of foodgrains to be maintained by each member state consisting of either wheat or rice, or a combination of both as assessed share of the country.

Food and Agricultural Organisation and Committee on World Food Security

Food and Agricultural Organisation (FAO) is one of the largest specialised agencies in the UN System, founded in 1945 with a mandate to raise levels of nutrition and standard of living by improving agricultural productivity and living conditions of rural population. The Committee on World Food Security (CFS) serves as a forum in the United Nations System for review and follow-up of policies concerning world food security, including food production, physical and economic access to food. India is a member of both FAO and CFS. Committee on World Food Security (CFS) monitors the progress of implementation of the WFS Plan of Action.

International Grains Council

India is a member of the International Grains Council (IGC), an inter-governmental forum of exporting and importing countries for cooperation in wheat and coarse grain matters which was previously known as International Wheat Council up to 1995. It administers the Grains Trade Convention, 1995. The IGC Secretariat, based in London since 1949, also services the Food Aid Committee, established under the Food Aid Convention. International Grains Agreement comprises Grains Trade Convention (GTC) and Food Aid Convention (FAC). India is a signatory to the International Grains Agreement (IGA), 1995 and its Grain Trade Convention (GTC), 1995 which is effective from 1995. IGC has two types of members—importing and exporting members. India has been included in the category of exporting member in July 2003 and represented in the meetings/sessions of the Council held from time to time.

Food Processing Industries

The Ministry of Food Processing Industries was set up in July, 1988, to give an impetus to development of food processing sector in the country. Later, this Ministry was made a Department and brought under the Ministry of Agriculture. It was again made a ministry in 2001 and named Ministry of Food Processing Industries.

The Ministry is concerned with formulation and implementation of the policies for the food processing industries within the overall national priorities and objectives. A strong and dynamic food processing sector plays a vital role in diversification and commercialisation of agriculture; enhancing shelf life; ensuring value addition to agricultural produce; generation of employment; enhancing income of farmers; and creating markets for export of agro foods. The Ministry acts as a catalyst for bringing in greater investment into this sector, guiding and helping the industry and creating a conducive environment of healthy growth of the food processing industry.

The subjects allocated to the Ministry under Government of India (Allocation of Business) Rules, 1961 are: (i) industries relating to: (a) processing and refrigeration of certain agricultural products (milk powder, infant milk food, malted milk food, condensed milk, ghee and other dairy products), poultry and eggs, meat and meat products; (b)

processing of fish (including canning and freezing); (c) establishment and servicing of development council for fish processing industry; (d) technical assistance and advise to fish processing industry; (e) fruit and vegetable processing industry (including freezing and dehydration); and (f) foodgrains milling industry, (ii) planning, development and control of, and assistance to, industries relating to bread, oil seeds, meals (edible), breakfast foods, biscuits, confectionery (including cocoa processing and chocolate making), malt extract, protein isolate, high protein food, weaning food and extruded food products (including other ready-to-eat foods); (iii) beer including non-alcoholic beer; (iv) alcoholic drinks from non-molasses base; (v) specialised packaging for food processing industry; and (vi) aerated water and soft drinks.

Website : www.mofpi.nic.in

Contribution of the Food Processing Sector

Over the years agricultural production in India has consistently recorded higher output. India ranks number one in the world in the production of milk, ghee, ginger, bananas, guavas, papayas and mangoes. Further, India ranks second in the world in the production of rice, wheat and several other vegetables and fruits. Abundant supply of raw materials, increase in demand for food products and incentives offered by the government has impacted food processing sector positively.

Employment in the Food Processing Sector

Food processing industry is one of the major employment intensive segments constituting 12.38 per cent of employment generated in all registered factory sector in 2017-18. According to the latest Annual Survey of Industries (ASI) data for 2017-18 (P), the total number of persons engaged in registered food processing sector was 19.33 lakhs. Unregistered food processing sector supports employment to 51.11 lakh workers as per the NSSO 73rd Round, 2015-16.

FDI in Food Processing Sector

Cent per cent FDI is permitted under the automatic route in food processing industries: manufacturing sector. FDI is allowed through approval route for trading, including through e-commerce in respect of food products manufactured and/or produced in India.

Food Processing and Make in India

Food processing sector has been identified as one of the priority sector under 'Make in India'. With a view to attract investment to this sector, Ministry of Food Processing Industries has been implementing schemes for development of infrastructure for promoting food processing industries.

Food Parks and Cold Chain

Ministry is following transparent selection process and online filing claims for the infrastructure development projects of Mega Food Parks and Cold Chain and all other schemes under Pradhan Mantri Kisan Sampda Yojana (PMKSY). A dedicated investor's portal called 'Nivesh Bandhu' was launched in 2017 to aid and assist potential investors in the food processing sector in taking informed decisions. This portal is a 'one stop information source' on central and state government policies, incentives offered, Agri Resources and infrastructure facilities across the country. An investor-friendly mobile App-'Nivesh Bandhu' was developed and launched to enable the investor to have access to relevant information very conveniently and from any destination from their mobile proving to be game changers for the investors in taking informed investment decisions.

Pradhan Mantri Kisan SAMPADA Yojana

Given the nature and size of processing units operating in the food processing sector, investment in basic infrastructure and common facilities are unlikely to come from the private sector in a significant way. With a view to augment private investment to food processing sector, the Ministry of Food Processing Industries, therefore, has been implementing a number of schemes for creation of infrastructure, expansion of processing capacity, and other supporting measures for healthy growth of food processing industry. All these existing schemes were reviewed, critical gaps identified and some new schemes were formulated to address these gaps in promoting the sector. All these schemes integrated under an umbrella - Pradhan Mantri Kisan SAMPADA Yojana (PMKSY) - and were launched in 2017 to give necessary thrust for accelerated growth of the sector. PMKSY is a comprehensive package resulting in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. Not only does it provides a big boost to the growth of food processing

sector in the country but also helps in providing better returns to farmers, which is a big step towards doubling of farmers' income, creating huge employment opportunities especially in the rural areas, reducing wastage of agricultural produce, increasing the level of processing and enhancing the export of the processed foods. The following schemes are implemented under PM Kisan SAMPADA Yojana: (i) mega food parks; (ii) integrated cold chain and value addition infrastructure; (iii) creation/ expansion of food processing and preservation capacities (unit scheme); (iv) infrastructure for agro-processing clusters; (v) creation of backward and forward linkages; (vi) food safety and quality assurance infrastructure; and (vii) human resources and institutions.

Mega Food Parks Scheme

Mega Food Parks Scheme, being implemented since 2008, aims to create a modern food processing infrastructure for the processing units based on a cluster approach and on a hub-and-spoke model in a demand-driven manner. The Scheme intends to facilitate establishment of an integrated value chain, with food processing at the core and supported by requisite forward and backward linkages. The central processing centre is networked with the primary processing centres and collection centres located at the farm gate in production areas. The broader idea behind the Scheme is to bring together farmers, processors and retailers and link agricultural production to the market so as to ensure maximisation of value addition, minimisation of wastages and improving farmers' income. The Scheme envisages a well-defined agri/horticultural-processing zone containing state-of-the-art processing facilities with support infrastructure and a well-established supply chain.

Scheme of Operation Greens

MoFPI launched a new central sector scheme "Operation Greens—A scheme for integrated development of Tomato, Onion and Potato". Operational Guidelines for the scheme of "Operation Greens" are uploaded on the website of the Ministry.

Major objectives of Scheme includes: (i) enhancing value realisation of tomato, onion and potato (TOP) farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market; (ii) price stabilisation for producers and consumers by proper production planning in the TOP

clusters and introduction of dual-use varieties through convergence with the scheme implemented by Mission for Integrated Development of Horticulture (MIDH) and state governments; and (iii) increase in food processing capacities and value addition in value chain by creating firm linkages with production clusters, etc.

National Mission on Food Processing

The Ministry launched a Centrally Sponsored Scheme—National Mission on Food Processing (NMFP) during 12th Plan in 2012. Five ongoing central sector schemes of 11th Plan and four new schemes were merged in the Mission. The CSS-NMFP was implemented through states/UTs. However, the CSS-NMFP was de-linked from the central support in 2015 pursuant to the recommendations of the 14th Finance Commission. Consequently, all nine schemes of the Mission stand discontinued.

Government of India approved a new central sector scheme - Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) - in 2017 with an outlay of ₹ 6,000 crore for the period 2016-20 co-terminous with the 14th Finance Commission cycle. It is a comprehensive package which will result in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. It will not only provide a big boost to the growth of food processing sector in the country but also help in providing better prices to farmers and is considered a big step towards doubling of farmers' income; creating huge employment opportunities especially in the rural areas; reducing wastage of agricultural produce; increasing the processing level; and enhancing the export of the processed foods.

National Institute of Food Technology, Entrepreneurship and Management

The Ministry established the National Institute of Food Technology, Entrepreneurship and Management at Kundli, in Haryana in May 2012. NIFTEM has been declared a Deemed University under de novo category. It is running B.Tech., M.Tech. and Ph.D. courses and undertakes R&D projects in the area of food technology. Under the Scheme, funds are to be provided to the Institute for creation of academic and administrative infrastructure like foreign students' hostel, sports facilities, hazardous

chemical storage, effluent treatment plant, solid waste management system, residential units, etc. Funds will also be provided to promote research activities, expand Village Adoption Programme (VAP) and skill development in the food processing sector. An allocation of ₹ 100 crore has been made to it.

Indian Institute of Food Processing Technology

The Ministry upgraded Indian Institute of Food Processing Technology (IIFPT), Thanjavur, Tamil Nadu to a national-level institute in 2008. IIFPT is running B.Tech., M.Tech. and Ph.D. courses and undertaking R&D projects in the area of food processing. Under the scheme funds are to be provided to the Institute for creation of infrastructure facilities including purchase of additional land (22.7 acres) for expanding campus and creation of academic and administrative infrastructure like machine fabrication and testing centre, sport complex, auditorium, opening training-cum-incubation centres and residential units, etc.

16 Health and Family Welfare

THE Ministry of Health and Family Welfare is instrumental and responsible for implementation of various programmes on the national scale in the areas of health and family welfare, prevention and control of major communicable and non-communicable diseases as well as promoting research across the country. It is responsible for formulating health and allied policies, providing guidance to states towards implementing health programmes, managing centrally sponsored health schemes and programmes, medical education, regulation (drugs and devices) and health infrastructure. The Ministry of Health Family Welfare (MoHFW) earlier had two departments namely Department of Health & Family Welfare and Department of Health Research.

Department of AIDS Control has been merged with Department of Health & Family Welfare in 2014 and is now known as National AIDS Control Organisation (NACO). In December 2014, Department of AYUSH was made Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) with focused attention on development of education and research in Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy systems. Directorate General of Health Services (DGHS) is an attached office which renders technical advice on all medical and public health matters and is involved in the implementation of various health services.

Websites: www.mohfw.gov.in www.dhr.gov.in

www.naco.gov.in

Management of Covid-19

World Health Organisation (WHO) declared Covid-19 a pandemic on March 11, 2020 and asked all countries to take urgent and aggressive action against this public health crisis.

As on December 15, 2020, a total of 99 lakh confirmed cases were reported in India. As many as 94.22 lakh patients have recovered. The

maximum cases and deaths were primarily reported from Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka, Uttar Pradesh, Delhi, West Bengal, Bihar, Telangana, Odisha, Assam, Kerala and Gujarat. All these states have reported more than one lakh cases.

The government undertook the Covid-19 challenge up front. It took the bold decision to announce a nation-wide lockdown which involved the community. A self-imposed Janata Curfew was initiated and India collectively stood up to manage the pandemic and successfully blunted the aggressive progression of the disease. The period of four months of lockdown was utilised to create additional health infrastructure, enhance human resource and produce within India critical elements such as PPEs (Personal Protective Equipment), N-95 masks and ventilators. Number of dedicated isolation beds increased 36.3 times and dedicated ICU beds increased over 24.6 times compared to what had existed in March 2020. Earlier, there was no indigenous manufacturing of PPE with the requisite standards; however, India is now self-sufficient and in a position to even export the same.

Government initiated a series of actions to prevent entry of the disease and to contain its spread. Eleven Empowered Groups were constituted on March 29, 2020 on different aspects of Covid-19 management in the country to take informed decisions on issues like: (i) medical emergency planning; (ii) availability of hospitals, isolation and quarantine facility, disease surveillance and testing; (iii) ensuring availability of essential medical equipment; (iv) augmenting human resource and capacity building; (v) supply chain and logistics management, (vi) coordination with private sector; (vii) economic and welfare measures; (viii) information, communications and public awareness; (ix) technology and data management; (x) public grievances; and (xi) strategic issues related to lockdown.

Several other measures were undertaken, for instance, travel advisories were issued in a graded manner, universal screening of passengers from all countries was introduced and up to March 23, 2020 (till suspension of all commercial flights), a total of 14,154 flights with 15,24,266 passengers were screened at the airports. In addition to airports, about 16.31 lakh persons were screened at land border crossings

and about 86,379 persons were screened at 12 major and 65 minor sea ports.

Community surveillance was initiated for travel-related cases and subsequently for cases being reported from community by Integrated Disease Surveillance Programme (IDSP). As on September 11, 2020, about 40 lakh persons have been kept under surveillance and extensive contact tracing of all positive cases is regularly being undertaken through disease surveillance network so as to break the chain of transmission.

The containment plans released by the Ministry of Health and Family Welfare envisage a strategy of breaking the chain of transmission by: (i) defining containment and buffer zones; (ii) applying strict perimeter control; (iii) intensive active house-to-house search for cases and contacts; (iv) isolation and testing of suspect cases and high-risk contacts; (v) quarantine of high-risk contacts; (vi) intensive risk communication to raise community awareness on simple preventive measures and need for prompt treatment seeking; and (vii) strengthening of passive Influenza Like Illness (ILI)/ Severe Acute Respiratory Illness (SARI) surveillance in containment and buffer zones.

The laboratory network is continuously being strengthened. Only a single laboratory was equipped to undertake testing for Covid-19 in January 2020; however, by the end of September 2020, 1,836 laboratories were conducting Covid-19 testing. Laboratories have been established in difficult terrains like Ladakh, Sikkim, Arunachal Pradesh, Nagaland as well as other North Eastern states, Lakshadweep and Andaman and Nicobar Islands. A total of 7.31 crore samples have been tested so far as on September 29, 2020. While there were no indigenous manufacturers of laboratory diagnostics or testing machines for Covid-19, today India has an indigenous production capacity of more than 10 lakh kits per day. India_2021_AMAZON: E published on AMAZON

A three-tier arrangement of health facilities was created for appropriate management. It includes: (i) Covid Care Centre with isolation beds for mild or pre-symptomatic cases; (ii) Dedicated Covid Health Centre (DCHC) with oxygen supported isolation beds for moderate cases; and (iii) Dedicated Covid Hospital (DCH) with ICU beds for severe cases. Tertiary care hospitals under Employees' State

Insurance Corporation (ESIC), defence, railways, paramilitary forces and Ministry of Steel have been leveraged for case management.

An AIIMS Corona helpline (9971876591) was started to guide the doctors on medical management. AIIMS, Delhi hosts the Covid-19 National Tele-consultation Centre (CoNTeC) which can be reached by calling +91-9115444155. It caters to doctors, from anywhere in the country, who want to consult AIIMS faculty for the management of the disease, as well as to the public in general. A clinical Center of Excellence (CoE) initiative was also launched by the ministry with AIIMS, Delhi as an apex nodal institution and state-level CoEs to provide guidance on clinical management protocols.

To ensure accessibility of quality treatment for both Covid-19 and non-Covid-19 health issues to far-flung areas, use of telemedicine has been promoted in a big way. 'eSanjeevani', a web-based comprehensive telemedicine solution, is being utilised (in 23 states) to extend the reach of specialised healthcare services to masses in both rural areas and isolated communities. More than 4 lakh tele-consultations have been held till September 29, 2020.

Indian Council of Medical Research (ICMR) is establishing a National Clinical Registry on Covid-19 that will provide insights into clinical course of Covid-19 disease, its spectrum and the outcome of patients.

The Ministry of AYUSH has also contributed for the management and mitigation of the pandemic by recommending guidelines of self-care as preventive health measures and for boosting immunity. Health advisories from different systems of medicine on prophylaxis and immunity promotion have been issued and translated into eight foreign languages and circulated to Indian Embassies. Various AYUSH Hospitals were designated as quarantine centres, isolation centres, Covid Care Centres and Covid Health Centres. Around 8.5 lakh AYUSH healthcare professionals have been registered on *Covidwarriors.gov.in.* An "Inter-disciplinary AYUSH R&D Task Force" was formed to prepare clinical research protocols for AYUSH prophylactic studies and add-on interventions in Covid-19 positive cases. AYUSH-CSIR collaborative studies were initiated with AYUSH medicines for prophylaxis/treatment.

Communication material and toolkits (pamphlets, poster, audio and audio-visual films) were developed and provided to the states/UTs on

Covid-19: preventive steps required to be taken by the communities, handling of myths and stigma related to the disease and to widely publicise the helpline numbers. Communication material is also being hosted on MoHFW website and through social media. A dedicated call center helpline (1075) was started in the initial days to guide community at large which is still being used by the citizens very effectively and on a regular basis.

National Health Mission

Besides progressing towards the commitments of the National Health Policy, the efforts of MoHFW are directed towards achieving the global goals, encompassing reproductive health as well as prevention of communicable diseases, viz., AIDS, TB, malaria, leprosy etc. The main emphasis in the health sector has been on increasing the funding to healthcare to at least 2 per cent of the GDP. As a step towards this goal, the National Rural Health Mission (NRHM) was launched in 2005 and it morphed into National Health Mission (NHM) with the launch of National Urban Health Mission (NUHM) in 2013.

Thereafter, NRHM and NUHM became two sub-missions under the overarching NHM. NHM envisages achievement of universal access to equitable, affordable and quality healthcare services that are accountable and responsive to people's needs. The main components of the programme are: strengthening the health system in rural and urban areas; Reproductive-Maternal-Neonatal-Child and Adolescent Health (RMNCH+A) interventions and control of communicable and non-communicable diseases.

Maternal and Child Health

Mission Indradhanush

Mission Indradhanush was launched in 2014 to cover all those children who have been partially vaccinated or not vaccinated during routine immunisation rounds. The objective of the scheme is to increase full immunisation coverage to at least 90 per cent children by 2020.

New Vaccines

(a) Inactivated Polio Vaccine (IPV): In concurrence with the World Polio End Game strategy, IPV was introduced in November 2015 in six states and expanded throughout the country by June 2016. Till August 2017, around 2.79 crore doses of IPV had been administered to children.

(b) Rotavirus Vaccine (RVV): This vaccine was launched in March 2016, to reduce the burden of diarrhoea caused by Rotavirus. Till 2018, RVV was introduced in 11 states (Andhra Pradesh, Haryana, Himachal Pradesh, Jharkhand, Odisha, Assam, Tripura, Rajasthan, Tamil Nadu, Madhya Pradesh and Uttar Pradesh). As per the expansion plan, all remaining 25 states/UTs have introduced RVV. Till June 2020, around 10.77 crore doses had been administered to children.

(c) Rubella Vaccine as Measles Rubella (MR) Vaccine: MR vaccine is being introduced through campaign targeting around 41 crore children in the age group of 9 months to 15 years followed by two doses in routine immunisation at 9-12 months and 16-24 months.

(d) Adult JE Vaccine: Japanese Encephalitis vaccination in children was introduced in 2006. However, the vaccine was expanded in adult population of districts with high disease burden in 2015. Presently, 38 districts across three states, viz. Assam, Uttar Pradesh and West Bengal have been notified for adult JE vaccination campaign. The campaign has been carried out in 35 of these endemic districts.

(e) Pneumococcal Conjugate Vaccine (PCV): This vaccine was launched in May 2017, to reduce child deaths due to pneumonia which is a major cause of child mortality. It has been introduced in Bihar, Himachal Pradesh, Madhya Pradesh, Rajasthan and Uttar Pradesh. A total of 319.05 lakh doses have been administered till June 2020.

(f) Tetanus and Adult Diphtheria (Td) Vaccine: Increase in immunisation coverage in children led to shift in agegroup of diphtheria cases to schoolgoing children and adults. Subsequently, Tetanus and Adult Diphtheria (Td) vaccine was recommended by National Technical Advisory Group on Immunisation (NTAGI) in 2016. Thereafter, Td vaccine has replaced two doses of TT or single booster dose of TT given to pregnant woman and booster doses at 10 and 16 years of age.

Rashtriya Bal Swasthya Karyakram

This initiative launched in 2013 entails provision for Child Health Screening and Early Intervention Services through early detection and

management of four Ds, i.e. defects at birth, diseases, deficiencies, development delays including disability and free management of 30 identified health conditions including surgery at tertiary health facilities. Children between 0-18 years of age are covered in a phased manner across the country.

Rashtriya Kishor Swasthya Karyakram

The Rashtriya Kishor Swasthya Karyakram (RKSK) was launched to provide information, commodities and services to meet the diverse needs of adolescents. The interventions under RKSK are:

Weekly Iron Folic Supplementation, an evidence-based programmatic response to the prevailing anemia situation amongst adolescent girls and boys through supervised weekly ingestion of IFA supplementation.

Menstrual Hygiene Scheme aims to ensure that adolescent girls have adequate knowledge and information about menstrual hygiene and the use of sanitary napkins and high-quality, safe products are made available to them with knowledge of environmentally safe disposal mechanisms.

Peer Educator Programme aims to ensure that adolescents are benefitted from regular and sustained peer education covering nutrition, sexual and reproductive health, conditions for non-communicable diseases (NCDs), substance misuse, injuries and violence (including gender-based violence) and mental health. To further equip the peer educators, the Ministry launched 'saathiya Resource Kit' in 2017. Understanding the growing number of mobile-based App users, Saathiya Salah App has also been made a part of the 'saathiya Resource Kit'. The App is linked to another important piece of cost-effective information platform of a toll-free Saathiya Helpline.

Mother's Absolute Affection Programme

"MAA-Mother's Absolute Affection" is an intensified programme to bring undiluted focus on promotion of breastfeeding and other infant and young child feeding practices through capacity building of health functionaries.

The goal of the MAA programme is to revitalise efforts towards promotion, protection and support of breastfeeding practices through health systems to enhance breastfeeding rates. The key components of the programme are— awareness generation, promotion of breastfeeding

and interpersonal counselling at community level, skilled support for breastfeeding at delivery points and monitoring and award/recognition.

Lactation Management Centres

Lactation Management Centres at high delivery load facilities provide comprehensive support for lactation management. It includes Comprehensive Lactation Management Centres (CLMCs) and Lactation Management Units (LMUs).

In CLMCs, there is a provision of Donor Human Milk (DHM) collected from the mothers who voluntarily donate their excess breast milk free-of-cost for the newborns who have no access to their own mothers' milk. LMUs facilitate lactation support to the mothers so that newborns can be breastfed successfully or provided mothers' own milk.

Janani Shishu Suraksha Karyakram

Janani Shishu Suraksha Karyakram (JSSK) scheme entitles all pregnant women delivering in public health institutions to absolutely free and no-expense delivery including caesarean section.

Janani Suraksha Yojana

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Health Mission. The objective is to reduce maternal and neonatal mortality by promoting institutional delivery among poor pregnant women.

Pradhan Mantri Surakshit Matritva Abhiyan

This programme aims to provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the ninth day of every month. PMSMA guarantees a minimum package of antenatal care services to women in their second or third trimesters of pregnancy at designated government health facilities. The programme follows a systematic approach for engagement with private sector which includes motivating private practitioners to volunteer for the campaign; developing strategies for generating awareness; and appealing to the private sector to participate in the programme at government health facilities.

National Deworming Day

To combat Soil Transmitted Helminth (STH) infections, the Ministry has adopted a single-day strategy called National Deworming Day (NDD), being implemented since 2015, wherein a single dose of Albendazole tablet is administered to children and adolescents of age 1-19 years bi-annually all over the country (except for Madhya Pradesh and Rajasthan where it is implemented annually), using platform of schools and anganwadi centres.

Anemia Mulct Bharat

In 2018, Anemia Mukt Bharat strategy was launched to achieve the envisaged target of 3 per cent reduction in anemia prevalence every year under the POSHAN Abhiyan. The strategy recommends x2 approach for treatment and reduction of anemia (nutritional and non-nutritional) in pre-school children (6-59 months), children (5-9 years), adolescent girls and boys (10-19 years), pregnant and lactating women and in women of reproductive age group (15-49 years) in programme mode through continuum of care approach.

The six interventions under Anemia Mukt Bharat strategy are: prophylactic iron folic acid supplementation; periodic deworming; intensified year-round behaviour change communication campaign including delayed cord clamping; testing and treatment of anemia using digital methods and point of care treatment; mandatory provision of iron folic acid fortified foods in public health programmes; and addressing non-nutritional causes of anemia in endemic pockets, with special focus on malaria, hemoglobinopathies and fluorosis.

Nutrition Rehabilitation Centers

Nutrition Rehabilitation Centers (NRCs) have been set up at public health facilities to provide medical and nutritional care to Severe Acute Malnourished (SAM) children under five years of age who have medical complications. In addition, the mothers are also imparted skills on child care and feeding practices so that the child continues to receive adequate care at home after discharge from NRC.

Family Planning

Initiated in 1952, the Family Planning programme was the first of its kind of national-level programme with a focus on population

stabilisation. Over the decades, it has evolved to the current holistic and target-free approach. The National Population Policy 2000 redefined it as a medium of intervention for promoting reproductive and child health. The programme focuses on assuring complete knowledge and access to reproductive rights and services and enables women and men to make individual reproductive choice. The objectives, strategies and activities of the Family Planning programme, have been meticulously designed in line with goals and objectives of various policies (National Population Policy 2000, National Health Policy 2002 and National Health Mission) and compliments India's commitment at international forums.

Ayushman Bharat

Comprehensive Primary Health Care (CPHC) through Ayushman Bharat Health and Wellness Centres (HWCs) holistically addresses health (covering prevention, promotion and ambulatory care), at primary, secondary and tertiary levels by adopting a continuum of care approach. Ayushman Bharat comprises two components: Ayushman Bharat Health and Wellness Centres and Ayushman Bharat Pradhan Mantri Jan Arogya Yojana.

(I) Ayushman Bharat Health and Wellness Centres

The first component of Ayushman Bharat pertains to creation of 1,50,000 Ayushman Bharat-Health and Wellness Centres (AB-HWCs) by upgrading the Sub Health Centres (SHCs) and rural and urban Primary Health Centres (PHCs) in order to bring healthcare closer to the community. This target also includes creation of 12,500 AYUSH HWCs by upgrading AYUSH Dispensaries and few SHCs to provide AYUSH primary healthcare services. These centres will provide Comprehensive Primary Health Care (CPHC), by expanding and strengthening the existing Reproductive and Child Health (RCH) and Communicable Diseases services and by including services related to Non-Communicable Diseases (common NCDs such as hypertension, diabetes and three common cancers of oral, breast and cervix) and incrementally adding primary healthcare services for mental health, ENT, opthalmology, oral health, geriatric and palliative care and trauma care as well as health promotion and wellness activities like yoga.

To promote wellness and healthy lifestyle, orientation of the public on wellness activities for lifestyle modification like increased physical activity (cyclathons and marathons), eating healthy and safe food, cessation of tobacco and drugs, meditation, laughter clubs, open gyms besides yoga sessions are carried out at these centres on regular basis. School Health Programme has been revised and recently Health and Wellness Ambassadors Initiative under Ayushman Bharat has been launched to promote a healthy lifestyle among students. It is a joint initiative of the Ministry of Health and Family Welfare and the Department of School Education and Literacy, Ministry of Education. Two teachers in every school designated as "Health and Wellness Ambassadors", and students as Health and Wellness Messengers under this initiative will be the agents of the changes for the families and community at large for creating a Fit India.

(II) Ayushman Bharat Pradhan Mantri Jan Arogya Yojana

In an attempt to move from sectoral and segmented approach of health service delivery to a comprehensive need-based healthcare service, Ayushman Bharat's second component, Pradhan Mantri Jan Arogya Yojana was designed to be interlinked with the Health and Wellness Centres in a continuum of care approach launched in September 2018. Ayushman Bharat PM-JAY is the largest health assurance scheme in the world. Households are included based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively.

Salient features of this scheme include: it is the world's largest health insurance/assurance scheme fully financed by the government and cost of implementation is shared between the central and state governments; it provides a cover of ₹ 5 lakhs per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals in the country; over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits; PM-JAY provides cashless access to healthcare services for the beneficiary at the point of service, that is, the hospital; and it covers up to three days of pre-hospitalisation and 15 days post-hospitalisation expenses such as diagnostics and medicines.

The scheme has been a huge success with 12,56,85,561 cards distributed till September 17, 2020, out of which 7.88 crore are PM-JAY cards and the rest 4.68 crore are state cards issued by the respective states.

Website: www.ayushmanbharat.co.in

National Tuberculosis Elimination Programme

The National Tuberculosis Elimination Programme (NTEP) (erstwhile Revised National Tuberculosis Control Programme) is an ongoing Centrally Sponsored Scheme implementing Tuberculosis prevention and control activities in a mission mode to achieve a rapid decline in burden of TB, morbidity and mortality towards ending TB in India by 2025.

Under NTEP, the government provides free diagnostics and quality assured drugs along with financial assistance of ₹ 500 per month during the course of treatment for all TB patients in the country. Altogether with 20,973 microscopy centres, all the districts have been linked to rapid molecular testing labs (total of 2,950), 703 districts have established functional DR-TB centres and there has been a 12 per cent increase in overall TB notification to 24.04 lakhs as compared to the previous year.

National Leprosy Eradication Programme

National Leprosy Eradication Programme (NLEP), India is a Centrally Sponsored Scheme under the umbrella of National Health Mission (NHM). The programme provides technical and financial assistance to states for all activities related to detection, diagnosis, treatment and post treatment care of persons affected by leprosy. The programme also aims at spreading awareness about the disease, and reducing stigma attached with the disease.

Further, with a view to scale up the early detection of cases, leprosy has been added to Rashtriya Bal Swasthya Karyakram (RBSK) for screening of children (0-18 years), and also to Rashtriya Kishore Swasthya Karyakram (RKSK) for screening and spreading awareness about leprosy. Besides, population based screening of women and men of age 30 years and above has been included in Comprehensive Primary Health Care under Ayushman Bharat at the Health and Wellness Centres.

National Viral Hepatitis Control Programme

National Viral Hepatitis Control Programme under the National Health Mission was launched in July 2018. The programme aims to target management of five crore people possibly harbouring the infection. Under the programme, free diagnostics and drugs are being made available to all in need, not only for treatment of Hepatitis C but also life-long management of Hepatitis B. The key strategies adopted under the programme include preventive, promotive and curative interventions with the focus on awareness generation, increasing access, promoting diagnosis and providing treatment for viral hepatitis.

National Vector Borne Disease Control Programme

The National Vector Borne Disease Control Programme (NVBDCP) is an umbrella programme for prevention and control of vector-borne diseases, namely, malaria, Japanese Encephalitis (JE), dengue, chikungunya, kala azar and lymphatic filariasis. Malaria and dengue are outbreak prone and climate sensitive. The states/UTs are responsible for implementation of the programme, whereas the Directorate of NVBDCP, Delhi provides technical assistance, policies and assistance to the states/UTs in the form of cash and commodity, as per approved pattern. Under NVBDCP, malaria, lymphatic filariasis and Kala Azar diseases are targeted for elimination.

Non-Communicable Diseases

National Programme for Prevention and Control of Fluorosis

Fluorosis, a crippling disease is caused by excess intake of fluoride mainly through drinking water. Desirable limit for fluoride in drinking water, as per BIS standards, is 1.0 mg/litre and the permissible limit is 1.5 mg/litre. Excess of fluoride in water or food results in major health disorders like Dental Fluorosis, Skeletal Fluorosis and Non-skeletal Fluorosis.

To tackle the problem of Fluorosis, National Programme for Prevention and Control of Fluorosis (NPPCF) was launched in 2008-09 (during 11th Five Year Plan) and it is being expanded in a phased manner, presently being implemented in 157 districts of 19 states.

National Oral Health Programme

The National Oral Health Programme (NOHP) was initiated in 2014-15 to strengthen the public health facilities of the country for an accessible, affordable and quality oral health care delivery. Support under the programme is provided to states for contractual appointment of dental surgeons, dental hygienists, dental assistants, procurement of dental equipment, and consumables required for treatment of dental diseases besides activities like awareness creation about oral diseases and capacity building by training the involved health personnel under the programme. The programme is operational across 36 states/UTs. The Center for Dental Education and Research (CDER) at AIIMS, New Delhi is identified as the National Center of Excellence for implementation of NOHP.

National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke

The objective of the programme is to address the challenge of rising burden of non-communicable diseases (NCDs). Under the programme, focus is on strengthening infrastructure, human resource development, health promotion, early diagnosis, management and referral to appropriate facilities. The programme is being implemented in all the states/UTs. Population-based screening for common NCDs including diabetes, hypertension and common cancers, namely oral, breast and cervical, has also been conducted under the programme. Screening for common NCDs is an integral part of service delivery under Ayushman Bharat Health and Wellness Centres.

Pradhan Mantri National Dialysis Programme

Under this programme, dialysis services are provided free-of-cost to poor patients, for which financial support is given to all the states/UTs under the National Health Mission. The programme is being implemented in 499 districts at 878 centres deploying 5,432 hemodialysis machines. Peritoneal dialysis has also been introduced under the programme.

mDiabetes Programme

mDiabetes Programme is a mobile-based initiative for health promotion for prevention and management of diabetes. It can be accessed by giving a missed call to 011-22901701.

Mental Healthcare

To address the challenge of mental illnesses, the government is implementing the National Mental Health Programme (NMHP) in the country. Under NMHP, implementation of the District Mental Health Programme (DMHP) has been approved for 692 districts of the country for early detection and management of mental disorders/illnesses. With the objective to address the shortage of qualified mental health professionals in the country, manpower development schemes are being implemented for establishment of Centres of Excellence and strengthening/establishment of Post Graduate (PG) Departments in mental health specialties.

The Mental Healthcare Act, 2017, which came into force on May 29, 2018 seeks to provide for mental healthcare and services for persons with mental illness and to protect, promote and fulfill the rights of such persons during delivery of services.

National Programme for Tobacco Control and Drug Addiction Treatment (NPTCDAT)

With an aim to streamline the tobacco cessation facilities for providing seamless services to all substance abuse including tobacco and drugs, the tertiary care component of National Tobacco Control Programme and Drug De-Addiction Programme (DDAP) have been converged together as National Programme for Tobacco Control and Drug Addiction Treatment (NPTCDAT) under the umbrella scheme of Financial Support for Tertiary Care Programme for non-communicable diseases and e-Health, 2017-2020 (now extended to March 31, 2021).

Tobacco Control

Electronic-cigarettes and like devices have been prohibited through "The Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act, 2019". The decision to prohibit e-cigarettes will help protect population, especially the youth and children, from the risk of addiction or initiation of psychoactive substances including nicotine through e-cigarettes.

Drug Addiction Treatment

Drug De-Addiction Programme (DDAP) was rolled out in 1987-88, with the objectives to provide affordable, accessible and evidence-based treatment for substance use disorders and to build the capacities of healthcare staff, in recognition and management of substance use disorders. Under DDAP, support is provided to government hospitals as Drug De-Addiction Treatment Centres and Drug Treatment Clinics (DTCs).

The Drug Treatment Clinics (DTCs) scheme is being implemented with a hub-and-spoke model. NDDTC, AIIMS, coordinates the scheme and funds are also allocated to NDDTC, AIIMS for 27 Drug Treatment Clinics (DTCs) to provide Out-patient treatment for drug de-addiction.

Medical Education

The National Medical Commission Bill, 2019 for setting up a National Medical Commission and to repeal the Indian Medical Council Act, 1956 has been passed by the Parliament. The Act was notified on August 8, 2019.

Phase-III of the Centrally Sponsored Scheme for establishment of new medical colleges attached with existing district/referral hospitals has been approved on August 28, 2019 to established 75 new medical colleges. The total cost per college is estimated at ₹ 325 crore with the fund sharing ratio of 90:10 for NE/Special Category States and 60:40 for other states. All DPRs have been approved.

Forty new Medical Colleges were granted permissions with 4,500 new MBBS seats for 2019-20. About 5,200 MBBS seats were increased under EWS quota for the academic year 2019-20.

The intake capacity of 11 existing Medical Colleges was increased in AY 2019-20 resulting in an increase of 850 MBBS seats in the country. *Increase in Post Graduate (PG) seats:* Letters of permission for 5,045 PG seats have been issued by BoG-MCI for AY 2020-21.

Dental Education

During the last three years (2017-2020), seven new dental colleges were established under the Dentists Act, 1948, resulting in addition of a total number of 520 BDS seats and 360 MDS seats in the country.

Pradhan Mantri Swasthya Suraksha Yojana

The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) envisages creation of tertiary healthcare capacity in medical education, research and clinical care, in the underserved areas of the country. It aims at correcting regional imbalances in the availability of affordable/reliable tertiary healthcare services and also augmenting facilities for quality medical education in the country. PMSSY has two components: projects involving setting up of new AIIMS like institutes and upgradation of existing Government Medical Colleges (GMCs). During the last 15 years, construction of 22 new AIIMS and 75 government medical college upgradation projects have been approved under this scheme.

Indian Council of Medical Research

As one of the oldest medical research bodies in the world, the Indian Council of Medical Research (ICMR) was established in 1911 as the Indian Research Fund Association (IRFA). For over a century, ICMR has spearheaded planning, formulation, coordination, implementation, and promotion of biomedical research both in India and internationally. It has remained the apex and premier medical research organisation in the country through its commitments to research, professional development, collaboration, and knowledge dissemination. Across its disease-specific 26 research institutes, as well as through extramural funding to medical colleges, universities, other S&T agencies and non-governmental organisations, ICMR has made significant scientific contributions to understanding various diseases of national importance such as malaria, Japanese Encephalitis, tuberculosis, HIV/AIDS, Kala Azar, filariasis, leprosy and poliomyelitis. ICMR has also demonstrated its commitment to current public health concerns including nutrition, reproductive and maternal and child health, occupational and environmental health and health systems research. Its research output and impact has demonstrated considerable and constant growth.

Department of Health Research (DHR)-ICMR is strengthening health research capacity of the nation through a network of 125 Viral Research and Diagnostic Laboratories (VRDLs), 90 Multi-disciplinary Research Units (MRU) and 25 Model Rural Health Research Units (MRHRU) in different parts of the country. MRUs and MRHRUs promote health research at the grassroots level and develop technological advances from

the lab to the field thus enabling younger generations to pursue high quality work on problems affecting the local population.

ICMR has been on the forefront in the fight against Coronavirus since its beginning in Wuhan, Hubei Province of China (December 2019) and detection of first case in Kerala in India (January 2020). Corona Control Room was set up at ICMR headquarters to develop appropriate strategies, strengthen ICMR DHR Viral Diagnostic Research Laboratory Network and close monitoring of situation for preparedness. National Institute of Virology, Pune, was the only lab that detected the first case of the Coronavirus in the country in January 2020 and developed RT-PCR diagnosis. Over the period of time, ICMR escalated the testing capacity and capability from one lab to more than 1,600 labs working 24x7 for testing of Covid-19 with more than five crore tests conducted as on September 9, 2020. ICMR expanded its activities from diagnosis and testing to validation and evaluation, procurement and distribution of reagents to conduct sero-prevalence and from developing guidelines/advisories to initiate research on Covid-19 and development of new diagnostics (*COVID KAWACH ELISA)* and vaccine candidate (Covaxin).

ICMR with the support from Department of Health Research is supporting Ayushman Bharat and ensuring a sustainable and cost-effective model through its ongoing programmes like health technology assessment, standard treatment workflows and national list of essential medicines and diagnostics. These programmes would serve as an important tool in prioritising national health spending and providing a uniform guidelines to ensure quality healthcare services across the nation.

Website: www.icmr.gov.in

Food Safety and Standards Authority of India

By enacting the Food Safety and Standards Act in 2006, India took an important step towards building a safe food culture in the country. This brought the nine regulations and various orders on food safety administered by different ministries under one umbrella. Ensuring availability of safe and wholesome food for human consumption is a key objective of the Act as per its preamble. Thus, the Act consolidated all

laws related to food and sparked a movement, from multi-level, multi-departmental controls in food safety and nutrition to an integrated line of command with an overarching policy framework for food safety and nutrition.

In 2008, the Food Safety and Standards Authority of India (FSSAI) was established under the aegis of the Ministry of Health and Family Welfare to enforce the provisions of the new law. Under the Act, the Food Authority is a single reference point for all matters related to food safety and standards in the country. The Food Authority is assisted by Scientific Committee and Panels in setting standards and the Central Advisory Committee in coordinating with enforcement agencies. The Food Authority guides and regulates all persons engaged in manufacturing, processing, import, transportation, storage, distribution and retails of food, on issues of food safety and nutrition with primary responsibility for enforcement largely with the Commissioners of Food Safety of states/UTs.

Website: www.fssai.gov.in

Drugs

SUGAM by Central Drugs Standards Control Organisation (CDSCO) enables online submission of applications, their tracking, processing and grant of approvals online mainly for drugs, clinical trials, ethics committee, medical devices, vaccines and cosmetics. It provides a single window for multiple stakeholders (Pharma Industry, Regulators, Citizens) involved in the processes of CDSCO.

Drugs and Vaccine Distribution Management System (DVDMS) (eAushidhi) deals with purchase, inventory management and distribution of various drugs, sutures and surgical items to various district drug warehouse of states/UTs, district hospitals, their sub-stores, etc., by automating the workflow of procurement, supply chain, quality control and finance department at state/UT level.

Free Drugs

The initiative has been launched with an objective to put in place systems such as facility wise Essential Drug List (EDL); robust procurement system; IT-backed logistics and supply chain management; proper warehousing and necessary drug regulatory and quality assurance

mechanisms; standard treatment guidelines; and prescription audit and grievance redressal systems to ensure provision of free essential drugs.

Affordable Medicine and Reliable Implants for Treatment

Affordable Medicines and Reliable Implants for Treatment (AMRIT) outlets provide drugs for cancer and cardiovascular diseases along with cardiac implants at 60 to 90 per cent discount on prevailing market rates.

e-Health

(I) National Digital Health Blueprint (NDHB)

The Committee constituted by the MoHFW to create an implementation framework for the National Health Stack (NHS) has come up with the National Digital Health Blueprint, after surveying the global best practices in adoption of digital technologies holistically. The key features of the blueprint include a federated architecture; a set of architectural principles; a 5-layered system of architectural building blocks; Unique Health Id (UHID); privacy and consent management, national portability; EHR, applicable standards and regulations; health analytics; and above all, multiple access channels like call centre, Digital Health India portal and MyHealth App. On August 15,2020, the National Digital Health Mission (NDHM) was implemented in the country. Currently, NDHM is being implemented in six UTs for pilot implementation.

(II) Centre for Health Informatics (CHI)

The Centre for Health Informatics (CHI) has undertaken multiple activities relating to e-Governance/e-Health for improving the efficiency and effectiveness of the healthcare system to achieve universal health coverage in the financial year 2019-20.

(III) Sanjeevani and eSanjeevani OPD

eSanjeevani, the telemedicine platform of MoHFW supports two types of teleconsultation services: Doctor-to-Doctor (it is known as eSanjeevani) and Patient-to-Doctor (it is called eSanjeevani OPD) tele-consultations. eSanjeevani is an important component of the Ayushman Bharat Health and Wellness Centres (AB-HWCs) programme. It was rolled out in November 2019 and aims to implement tele-consultation in all the 1.5 lakh Health and Wellness Centres in a ‘hub-and-spoke’ model,

by December 2022. NHM in states identify and set up dedicated 'Hubs' in medical colleges and district hospitals to enable tele-consultation services to 'spokes', set up at special health centres and primary health centres.

On April 13, 2020, MoHFW also rolled out 'eSanjeevaniOPD'—the patient to doctor tele-consultation service owing to the Covid-19 pandemic during the lockdown when OPDs in the country were shut down. eSanjeevaniOPD has been rolled out in 24 states, around 4,000 doctors have been trained and onboarded to provide telemedicine services to the populace.

National AIDS Control Programme

The government is currently implementing National AIDS Control Programme (NACP)-Phase IV (Ext.) as a fully funded central sector scheme to respond to the HIV/AIDS epidemic in country. Under the programme, comprehensive services across HIV prevention-testing-treatment-retention is being offered through 1,411 non-government organisations/community-based organisations targeted interventions, around 33,450 HIV counselling and testing/ screening facilities and 570 Anti-retroviral treatment (ART) Centres. In FY 2019-20, around 85 lakh people from high-risk group and bridge population were covered under the programme. In the same duration, more than 5 crores screening and testing for HIV was done that included around 2.5 crore pregnant women. As in March 2020, around 14.86 lakh HIV infected people were on ART including around 1.06 lakh in private sector.

Under the NACP, to mitigate the impact of Covid-19 pandemic on the uptake of HIV/AIDS services, guidance notes have been issued to all state/union territories, AIDS Control Societies (SACS) to facilitate continuity of HIV prevention; testing and treatment services as much as possible through differentiated modalities like multi-month dispensation of Anti-retroviral treatment (ART); and community-based screening for HIV and decentralised options for management including enabling directives for commodities, transportation.

Ministry of AYUSH

The Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was established in the Ministry of Health and Family Welfare in 1995. It was rechristened as Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy with acronym AYUSH in 2003. In keeping with the policy of the government to lay focused thrust on the Indian traditional systems of medicine, popularisation of AYUSH systems of healthcare and to realise the cherished vision of the Prime Minister to make AYUSH the preferred system of medicine and Yoga a world-wide phenomenon, the Department of AYUSH was granted the status of Ministry in 2014. The Ministry is responsible for policy formulation, development and implementation of programmes for the growth, development and propagation of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) systems of healthcare. Sowa-Rigpa is the recent addition to the existing facility of AYUSH systems.

The Ministry has five Research Councils, two statutory regulatory organisations, 11 National Institutes, one organisation under Pharmacopoeia, one Public Sector Undertaking and a National Medicinal Plants Board under its administrative fold.

Website: www.ayush.gov.in

AYUSH Systems of Healthcare

Ayurveda

'Ayurveda' literally means "Science of Life". Ayurveda is evolved from the various Vedic hymns rooted in the fundamental philosophies about life, disease and health. The Charak Samhita and Sushruta Samhita developed around 2500 BC are the main treaties of Ayurveda fully available today. According to Ayurveda, health is considered as a pre-requisite for achieving the goals of life, i.e., Dharma, Artha, Kama and Moksha. Ayurveda takes an integrated view of the physical, mental, spiritual and social aspects of human beings and about the inter-relationships between these aspects.

Yoga

Yoga is essentially spiritual and it is an art and science of healthy living which focuses on bringing harmony between body and mind. The

word ‘Yoga’ has two meanings; the first comes from the root ‘Yujir’ or ‘Union’, the second is derived from a different root ‘yuja’ which means ’samadhi’—the highest state of mind and the absolute knowledge. These two are the most important meanings of the word Yoga according to Panini, the most well-known Sanskrit grammarian.

Yoga is being practiced as part of healthy lifestyle and has become part of our spiritual heritage. In the present era, Yoga is popular world-wide because of its spiritual values, therapeutic credentials, its role in the prevention of diseases, promotion of health and management of lifestyle related disorders. Several clinical studies have lucidly demonstrated the therapeutic potentials of Yoga in the treatment of many lifestyle related or psychosomatic disorders. The specialty of this system is that it can get along with any other systems of health care.

Naturopathy

Naturopathy is a science of health and healing and a drug-less therapy based on a well-founded philosophy. It has its own concept of health and disease and principles of treatment. Naturopathy is a system of medicine that advocates harmonious living with constructive principles of nature on physical, mental, moral and spiritual planes. It has great health promotive and restorative, and disease preventive as well as curative potential.

Unani

The Unani system of medicine originated in Greece and passed through many countries before establishing itself in India during the medieval period. It is based on well-established knowledge and practices relating to the promotion of positive health and prevention of disease. The fusion of traditional knowledge of ancient civilisations like Egypt, Arabia, Iran, China, Syria and India, it emphasises the use of naturally occurring mostly herbal medicines and some medicines of animals, marine and mineral origin. This system of medicine was documented in Al-Qanoon, a medical classics, by Sheikh Bu-Ali Sina (Avicena) (980-1037 AD), in Al-Havi by Razi (850-923 AD) and in many others books written by the Unani physicians.

Siddha

The Siddha System of medicine is one of the ancient systems of medicine in India having its close links with Dravidian culture. The term 'siddha' means achievements and Siddhars are those who have achieved perfection in medicine. Eighteen Siddhars are said to have contributed towards the systematic development of this system and recorded their experiences in Tamil language.

Homoeopathy

The physicians from the time of Hippocrates (around 400 BC) had observed that certain substances could produce symptoms of a disease in healthy people similar to those of people suffering from the disease. Dr. Christian Friedrich Samuel Hahnemann, a German physician, scientifically examined this phenomenon and codified the fundamental principles of Homoeopathy. Homoeopathy was brought into India around 1810 AD by European missionaries and received official recognition by a Resolution passed by the Constituent Assembly in 1948 and then by the Parliament.

Sowa-Rigpa

Sowa-Rigpa is among the oldest surviving health traditions of the world with a living history of more than 2,500 years. It has been in vogue and practised in Himalayan regions throughout particularly in Leh and Laddakh (J&K), Himachal Pradesh, Arunachal Pradesh, Sikkim, Darjeeling, etc. Sowa-Rigpa is effective in managing chronic diseases like asthma, bronchitis, arthritis, etc. The basic theory of Sowa-Rigpa is explained in terms of: (i) the body and the mind as the locus of treatment; (ii) antidote, i.e., the treatment; (iii) the method of treatment through antidote; (iv) medicines that cure the disease; and lastly (v) pharmacology. Sowa-Rigpa emphasises the importance of the five cosmological physical elements in the formation of the human body, the nature of disorders and the remedial measures.

Ayush Healthcare Infrastructure

National AYUSH Mission (NAM) was notified in 2014 which envisages better access to AYUSH services including co-location of AYUSH facilities at Primary Health Centres (PHCs); Community Health Centres (CHCs) and District Hospitals (DHs); upgradation of existing Government AYUSH Hospitals; upgradation of existing government/panchayat/ government aided AYUSH dispensaries; and

setting up of up to 50-bedded integrated AYUSH hospitals. It also envisages strengthening of AYUSH educational institutions, facilitate the enforcement of quality control of Ayurveda, Siddha, Unani and Homoeopathy (ASU&H) drugs and sustainable availability of ASU&H rawmaterials in the states/UTs during 12th Plan.

Ayush Drug Quality Control

Ministry of AYUSH has a Drug Control Cell to look after and co-ordinate in matters related to Ayurvedic, Siddha, Unani and Homoeopathy (ASU&H) drugs. In addition, the Ministry has taken up amendment of the Drugs and Cosmetics Rules, 1945 for promoting scientific data based shelf life studies and prohibition of the use of prefix and suffix with the names of classical formulations. Under the centrally sponsored initiative of the National AYUSH Mission, grant-in-aid is provided to the states for strengthening of infrastructural, functional and regulatory capacity for manufacturing and testing of drugs and enforcement of the regulatory provisions. Capacity building programmes for the regulatory and scientific staff of the states are regularly organised at the Pharmacopoeial Laboratory of Indian Medicine (PLIM) and the Homoeopathy Pharmacopoeial Laboratory (HPL).

Medical Education in Ayush

The Central Council of Indian Medicine (CCIM) is the statutory body constituted under the Indian Medicine Central Council Act, 1970, which lays down the standards of medical education in Ayurveda, Siddha and Unani through its various regulations. Similarly, Homoeopathy medical education is being regulated by Central Council of Homoeopathy (CCH) through its various regulations under the Homoeopathy Central Council Act, 1973. For medical education in Yoga and Naturopathy, no such governing body exists. Following courses are being offered by the Ayurveda, Siddha, Unani and Homoeopathy (ASU&H) colleges: (i) Bachelor of Ayurvedic Medicine and Surgery (BAMS); (ii) Bachelor of Unani Medicine and Surgery (BUMS); (iii) Bachelor of Siddha Medicine and Surgery (BSMS); (iv) Bachelor of Homoeopathy Medicine and Surgery (BHMS); (v)Post-graduate Ayurveda degree in different specialities (MD/M.S.-Ayurveda); (vi)Post-graduate Unani degree in different specialities (MD/MS-Unani); (vii) Post-graduate Siddha degree

in different specialities (MD/MS-Siddha); and (viii) Post-graduate Homoeopathy degree in different specialities (MD-Homoeopathy)

Undergraduate Education

There are in all 549 ASU&H (297 Ayurveda, 9 Siddha, 46 Unani and 197 Homoeopathy) colleges imparting ASU&H education in the country, out of which 543 ASU&H (295 Ayurveda, 8 Siddha, 45 Unani and 195 Homoeopathy) colleges imparting undergraduate ASU&H education with an admission capacity of 33,611 students in India as on 01.01.2016. Out of 543 colleges, 102 ASU&H (57 Ayurveda, 3 Siddha, 10 Unani and 32 Homoeopathy) colleges with 5,236 intake capacity (2,967 Ayurveda, 160 Siddha, 431 Unani and 1,678 Homoeopathy) belong to the government sector.

Post-Graduate Courses

Out of all medical colleges imparting post graduate ASU&H education, six colleges (2 Ayurveda, 2 Homoeopathy, 1 Unani and 1 Siddha) with admission capacity of 225 students (60 Ayurveda, 72 Homoeopathy, 47 Unani and 46 Siddha) were exclusively post-graduate institutions.

Autonomous Institutes imparting ASU&H education

(i) National Institute of Ayurveda, Jaipur: It offers undergraduate, post-graduate and fellowship programmes in Ayurveda with intake capacity of 92 students in undergraduate and 104 students in 14 post-graduate courses. It also conducts a Diploma course in Ayurveda Nursing and Pharmacy. The Institute has two hospitals with a bed strength of 300. For the benefits of population belongings to SC and ST, the Institute also organises regular medical camps in SC and ST inhabited districts of Rajasthan through its mobile clinical unit to provide free medical facility.

(ii) Institute of Post Graduate Teaching and Research in Ayurveda, Jamnagar: The Institute offers 10 post-graduate courses with intake capacity of 50 students and Ph.D. courses. Funded by the Government of India, it is governed by the Acts & Statute of Gujarat Ayurveda University. The Institute organised various outreach activities in Ayurveda for national programmes and conducted medical camps in rural areas of Gujarat. It has a well-managed hospital with OPD and IPD facilities.

(iii) National Institute of Homoeopathy, Kolkata: It offers undergraduate, post-graduate courses in homoeopathy with intake capacity of 93 students in under-graduate and 36 students in 6 post-graduate courses. It has a 100-bedded hospital attached to it which is being upgraded to a 250-bed hospital. A new hospital building has been constructed by CPWD with additional diagnostic facilities. The academic block has also been augmented from three-storey to seven-storey structure.

(iv) National Institute of Unani Medicine, Bengaluru: It offers 8 post-graduate level course in Unani with intake capacity of 47 students and has a 180-bedded hospital. The institute regularly organises academic activities like CME programmes, workshops, seminars and guest lectures. The hospital of the institute provides clinical services to the patients from general and specialty OPDs for skin diseases, GIT and hepato-billiary disorders, neurological disorders, psychiatric and geriatric care.

(v) National Institute of Siddha, Chennai: It offers 6 post-graduate courses in Siddha with intake capacity of 46 students, provides medical care and undertakes research to promote and propagate the Siddha system of medicine. A 160-bedded in-patient facility provides medical care in accordance with respective PG Departments. The institute organises two medical camps on every Saturday, one in a rural area and the other in a semi-urban area to provide free medical facilities to promote the Siddha Medicine as well as community oriented approach to students.

Others are: Rashtriya Ayurveda Vidyapeeth, New Delhi; National Institute of Naturopathy, Pune; Morarji Desai National Institute of Yoga, New Delhi; All India Institute of Ayurveda, New Delhi; North-Eastern Institute of Folk Medicine, Pasighat; and North-Eastern Institute of Ayurveda and Homoeopathy, Shillong.

These institutes have expanded their mandate of late and have included a number of courses for skill development in the field of health services. These institutes have also upgraded their facilities and have attracted students from many foreign countries for various educational programmes. Keeping pace with time, the intake capacity of the institutes in various UG, PG, certificate, diploma and Ph.D. prorammes has been enhanced. These institutes have also entered into MoU with different

national and international bodies. The healthcare services provided by the institutes is evident from the footfalls of the patient in Out Patient Department (OPD) and In Patient Department (IPD). The institutes have responded to the requirement of time to upgrade their technological and infrastructural facilities.

Research in AYUSH

The government has set up five autonomous research councils, namely, Central Council for Research in Ayurvedic Sciences (CCRAS); Central Council for Research in Yoga & Naturopathy (CCRYN); Central Council for Research in Unani Medicines (CCRUM); Central Council for Research in Siddha (CCRS); and Central Council for Research in Homoeopathy (CCRH) with the mandate to undertake research in their respective system. Recently, for the management of diabetes mellitus, the Central Council for Research in Ayurvedic Sciences (CCRAS) has developed a formulation called AYUSH-82 from 5 Ayurvedic medicinal plants. The trials of the drug have shown significant reduction in blood sugar level along with clinical improvement. No toxic effects were noted during the trial. CCRAS has initiated action to commercialise AYUSH-82.

In addition to its research work, the 81 institutes under the Council also provide healthcare facilities. The CCRH through its programme namely, Homoeopathy for Healthy Child enrolled 40,000 children with an aim to help them during dentition period and treatment of disease.

National Medicinal Plants Board

National Medicinal Plants Board (NMPB) is an apex national body which co-ordinates all matters relating to medicinal plants sector in the country. The Board was established in 2000 and acts as advisory body to the concerned ministries, departments and agencies in strategic planning of medicinal plants related initiatives and to plan and provide financial support to programmes relating to conservation, cultivation and also all-round development of medicinal plants sector.

AYUSH Services

The National AYUSH Mission (NAM) is a turning point as it interalia envisages better access to AYUSH services through increase in the number of AYUSH hospitals and dispensaries, ensuring availability of

AYUSH drugs and trained manpower. It also aims at improvement in quality of AYUSH Education through enhancement in the number of upgraded educational Institutions, sustained availability of quality raw materials and improved availability of quality Ayurveda, Siddha, Unani and Homoeopathy (ASU&H) drugs through increase in number of pharmacies, setting up of drug laboratories in the states which are responsible for enforcement mechanism of ASU&H drugs.

AYUSH Pharmacopoeial Laboratories

(i) Pharmacopoeial Laboratory for Indian Medicine (PLIM)

Pharmacopoeial Laboratory for Indian Medicine (PLIM) is a subordinate office of Ministry of AYUSH located at Ghaziabad. The laboratory was established in 1970 as a Pharmacopoeial Standards Setting-cum-Drugs testing laboratory at national level for Ayurvedic, Siddha and Unani (ASU) Medicine. It acts as an appellate laboratory for testing of Ayurvedic, Siddha and Unani (ASU) drugs under Drugs & Cosmetic Act, 1940. The Pharmacopoeial Laboratory for Indian Medicine was established with the objective to develop and validate Pharmacopoeial standardisation of single drug and compound formulations for incorporation in Ayurvedic, Siddha and Unani Pharmacopoeias and analysis of legal drugs samples received from Drugs Control Authorities and Courts.

(ii) Homoeopathic Pharmacopoeial Laboratory (HPL)

Homoeopathic Pharmacopoeia Laboratory, Ghaziabad was set up as a national laboratory for the purpose of laying down standards and testing for identity, purity and quality of homoeopathic medicines. The laboratory also functions as central drug laboratory for the testing of homoeopathic medicines. Standards worked out by the laboratory are published in the Homoeopathic Pharmacopoeia of India (HPI). The Department of Science and Technology has recognised HPL as Science and Technology Institution.

(iii) Pharmacopoeia Commission for Indian Medicines & Homeopathy (PCIM&H)

Development of quality standards on Ayurvedic, Siddha, Unani and Homoeopathic Medicine and their periodic update to the needs of the consumers is the priority of the Ministry of AYUSH. The popularity and demand of ASU&H medicines is increasing rapidly. The Pharmacopoeia

Commission for Indian Medicines & Homeopathy (PCIM&H) is an autonomous organisation registered under Societies Registration Act, 1860. The main mandate of the commission is publication and revision of the Ayurvedic, Siddha, Unani and Homoeopathy Pharmacopoeia of India at suitable intervals; publication and revision of the Ayurveda, Siddha and Unani Formularies as well as Homoeopathic Pharmaceutical Codex; nurture and promote awareness of quality in ASU&H drugs/formulations and drug research on ASU&H products; exchange information and interact with expert committees of the World Health Organisation and other international bodies with a view to harmonise and develop the ASU&H Pharmacopoeial standards to make those internationally acceptable; maintain national repository of authentic reference raw materials used in the manufacture of Ayurveda, Siddha, Unani and Homeopathy medicine for the purpose of reference and supply of reference standards to the stakeholders at a price; and generate and maintain repository of chemical reference marker compounds of the plants or other ingredients used in standardising Ayurveda, Siddha, Unani and Homeopathy medicine and supply them as reference standards to the stakeholders on price, etc.

Regulatory Councils

The Statutory Regulatory Councils under AYUSH are:

(i) Central Council of Indian Medicine (CCIM), New Delhi

The Central Council of Indian Medicine is a statutory body constituted under the Indian Medicine Central Council Act, 1970. The main objectives of the Central Council include: (i) to prescribe the minimum standards of education in Indian Systems of Medicine, viz., Ayurveda, Siddha, Unani Tib and Sowa-Rigpa; (ii) to advise central government in matters relating to recognition (inclusion/withdrawal) of medical qualification in/from Second Schedule to Indian Medicine Central Council Act, 1970; (iii) to maintain a Central Register of Indian Medicine and revise the Register from time to time; and (iv) to prescribe standards of professional conduct, etiquette and code of ethics to be observed by the practitioners.

The Central Council of Indian Medicine has prescribed Regulations for Undergraduate and Post-graduate courses of Ayurveda, Siddha, Unani Tib and Sowa-Rigpa considering that after completion of education, they

would become profound scholars having deep basis of Ayurveda, Siddha, Unani and Sowa-Rigpa with scientific knowledge in the fundamental respective systems.

Website: www.ccimindia.org

(ii) Central Council of Homoeopathy (CCH), New Delhi

Central Council of Homoeopathy has been constituted by the central government under the provisions of the Homoeopathy Central Council Act, 1973, for the maintenance of a Central Register of Homoeopathy and for other matters connected therewith. The Homoeopathy Central Council Act, 1973 was amended lastly in 2002, provisions of which were enforced from 2003. Besides the maintenance of the Central Register, Homoeopathy Central Council Act, 1973 (as amended) empowers the Central Council to: (i) prescribe minimum standards of education in Homoeopathy to be followed by universities and medical institutions; (ii) recommend recognition or withdrawal of recognition of medical qualification granted by universities, boards or institutions in India to central government; (iii) to negotiate with the authorities in any state or country outside India, which by the law of that state or country has the authority to maintain a Register of Practitioners of Homoeopathy for settling of a scheme of recognition of medical qualification in Homoeopathy on reciprocal basis; and (iv) recommend to central government for permission of opening of new colleges, increase of seats and starting of new or higher courses.

Website: www.cchindia.com

Public Sector Undertaking

Indian Medicines Pharmaceutical Corporation Limited

Indian Medicines Pharmaceutical Corporation Limited (IMPCL), a Government of India Enterprise having 98.01 per cent shares of Government of India and 1.99 per cent shares of Uttarakhand government through Kumaon Mandal Vikas Nigam Ltd, was incorporated in 1978. The registered office and factory of the company is at Mohan (Via-Ramnagar), District Almora, Uttarakhand-244715. IMPCL comes under the administrative control of the Ministry of AYUSH, New Delhi. The Company is schedule D, 'Mini-Ratna' Category-ll, GMP & ISO

9001:2015 certified Central Public Sector Undertaking. The Company was set up with the objectives to manufacture and supply the genuine and efficacious Ayurvedic and Unani medicines to the central government hospitals, central government research units all over India and to state government departments besides sales in the open market.

17 Housing and Urban Affairs

THE Ministry of Housing and Urban Affairs (MoHUA) is entrusted with the responsibility of broad policy formulation and monitoring of programmes regarding urban housing and urban development. It is the nodal ministry for planning and coordination of urban transport matters at the central level. Urban development is a state subject and the Constitution (Seventy-Fourth) Amendment Act, 1992, enjoins upon the state governments to delegate many functions to urban local bodies. Government of India, however, plays a coordinating and monitoring role and also supports various urban housing programmes, urban livelihood mission and overall urban development through Central and Centrally Sponsored Schemes. The Ministry addresses various issues relevant to urban sector through appropriate policy guidelines, subordinate legislation and sectoral programmes.

Website: www.mohua.gov.in

Urbanisation in India has become an important and irreversible process, and it is an important determinant of national economic growth and poverty reduction. The process of urbanisation has been characterised by a dramatic increase in the number of large cities, although India may be said to be in the midst of transition from a predominantly rural to a quasi-urban society. The 2030 development agenda of the United Nations has emphasised the role of sustainable cities by incorporating Sustainable Development Goal (SDG), i.e., Sustainable Cities and Communities for making cities and human settlements inclusive, safe, resilient and sustainable. As per the Census of India 2011, the population of India is 1,210.50 million, of which 377.10 million (31.2 per cent) is urban and 833.40 million (68.8 per cent) is rural. The urban population is located in 7,933 towns, comprising 4,041 statutory towns and 3,892 census towns. During 2000-11, in absolute terms, the decadal increase in urban population was 90.99 million vis-a-vis 90.97 million in rural population. At current rate of growth, urban

population is estimated to reach a staggering 575 million by 2030 and 875 million by 2050.

Pradhan Mantri Awas Yojana—Housing for All (Urban)

Mission Pradhan Mantri Awas Yojana (Urban) for ensuring housing for all in urban areas was launched in 2015 as a flagship mission and is to be implemented during 2015-22. The mission provides central assistance to all eligible families/ beneficiaries across all statutory towns for houses. States/UTs will have the flexibility to include the Planning Areas (to the exclusion of rural areas) as notified with respect to Statutory Towns and such Planning Areas (to the exclusion of rural areas) as notified by development authorities. To address Housing for All in urban area, the mission has four verticals: (a) *In-situ* Slum Redevelopment (ISSR) with participation of private developers using land as resource for providing housing to eligible slum dwellers; (b) affordable housing through credit-linked subsidy scheme (CLSS now renamed as CLSS for EWS/LIG); (c) Affordable Housing in Partnership (AHP) with public and private sectors; and (d) subsidy for beneficiary-led individual house construction/enhancements: size of house for Economically Weaker Section (EWS) is 30 sq. m., in carpet area but states have flexibility to enhance the size of houses in consultation with the Ministry. EWS family has been defined as the family with annual income up to ₹ 3 lakh and LIG with annual income between ₹ 3-6 lakh.

Progress of the Scheme

The coverage of the mission was earlier limited to all statutory towns as per Census 2011 and towns notified subsequently. In order to ensure that the benefits admissible under the mission outreach the large segment of the population the coverage area defined in Para 2.1 of the scheme guidelines has subsequently been revised thrice. With the last amendment in 2018, coverage is now extended to the entire urban areas consisting of all statutory towns and areas including Notified Planning/development area/industrial development authority/special area development authority/urban development authority or any such Authority under state legislation which is entrusted with the functions of urban planning and regulations. The PMAY(U) mission has number of systems in place to ensure transparency in demand survey, beneficiary

selection, de-duplication, fund transfer, monitoring, etc. Field level verification is done through third-party quality and monitoring agency and social audit. Each state also has dedicated state/city level technical cells for implementation and monitoring of the mission.

A comprehensive and robust MIS system is in place that helps all stakeholders to seamlessly manage information pertaining to physical and financial progress. The MIS allows the submitting of online demand survey with tracking facility and helps in housekeeping of various records through digitisation such as survey, project information, beneficiary details, fund utilisation, etc. The MIS is equipped with geo-tagging features and integrated with BHUVAN Portal of National Remote Sensing Centre (NRSC) and BHARAT MAP of National Informatics Centre (NIC) for monitoring the progress of construction of houses. The MIS is utilising services from UIDAI servers for 'on the fly' demographic authentication of Aadhaar of beneficiaries. The MIS has also been integrated with UMANG Mobile App, NITI Aayog Dashboard and DBT Bharat Portal for sharing of mission critical information with different stakeholders. The transfer of the central and state shares to the beneficiaries of BLC vertical of the mission is being done by states/ULB's through DBT mode where the instalments are credited directly into the beneficiary's bank account as per construction stage completed and geo-tagged.

The mission has crossed the momentous milestone of 1 crore and is now one of the largest affordable housing programme in the world. It has covered a range of social groups which comprises senior citizens, construction workers, domestic workers, artisans, differentlyabled, transgender and leprosy patients. Empowerment of women is an in-built design of the scheme where the ownership of the house is in the name of the female head of the household or in the joint name of male head of the household.

Smart Cities Mission

The Smart Cities Mission was launched in 2015. The objective of the Mission is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'smart' solutions. Some of the core infrastructure

elements in a Smart City would include adequate water supply; assured electricity supply; sanitation; including solid waste management; efficient urban mobility and public transport; affordable housing, especially for the poor; robust IT connectivity and digitalisation; good governance, especially e-Governance and citizen participation; sustainable environment; safety and security of citizens, particularly women, children and the elderly; and health and education.

In the approach of the Smart Cities Mission, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'smart' solutions. Under it, 100 Smart Cities have been selected in 4 Rounds based on an All India Competition. All 100 cities have incorporated Special Purpose Vehicles (SPVs), City Level Advisory Forums (CLAFs) and appointed Project Management Consultants (PMCs).

In the 100 cities under the Mission it is proposed to execute 5,151 projects worth ₹ 2,05,018 crore in 5 years from their respective dates of selection.

Jawaharlal Nehru National Urban Renewal Mission

The Jawaharlal Nehru National Urban Renewal Mission (JnNURM) was launched in 2005 as the first flagship scheme of this Ministry. JnNURM implemented by MoHUPA has two components: Basic Services for Urban poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP), which are aimed at integrated development of slums through projects for providing shelter, basic services and other related civic amenities with a view to providing utilities to the urban poor. Under BSUP, project cost is shared in the ratio of 50:50 for cities with population more than 1 million (as per Census 2001), 80:20 for other smaller Mission Cities and 90:10 for North Eastern and special category states. Entire cost of construction of Dwelling Units (DUs) and associated infrastructure was shared as per the above mentioned sharing pattern without any limitation. Under IHSDP, project cost is shared in the ratio of 80:20 for remaining smaller cities and 90:10 for North Eastern and special category states.

The two components of JnNURM were mandated to pursue 3 key pro-poor reforms, namely, (a) earmarking of 25 per cent of municipal budget for the urban poor for provision of basic services including affordable housing to the urban poor; (b) implementation of 7-Point Charter, namely provision of land tenure, affordable housing, water, sanitation, education, health and social security to the poor in a time-bound manner ensuring convergence with other programmes; and (c) reservation of 25 per cent of developed land in all housing projects, public or private, critical for slum improvement.

Atal Mission for Rejuvenation and Urban Transformation

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched in 2015. In all, 500 cities have been included in the Mission. All Urban Local Bodies (ULBs) with a population of one lakh or more, all other capital cities of states/UTs and all Heritage City Development and Augmentation Yojana (HRIDAY) cities, identified cities on the stem of the main rivers, from hill states, islands and tourist destinations. Approximately 60 per cent of urban population in the country is covered under AMRUT. It is a centrally sponsored scheme with a total outlay of ₹ 1 lakh crore including a Central Assistance of ₹ 50,000 crore spread over 5 years, i.e., from 2015-16 to 2019-2020. The balance share of ₹ 50,000 crore has to come from states and ULBs.

The thrust areas of the Mission are water supply, sewerage and septage management, storm water drainage, green spaces and park, non-motorised urban transport and capacity building. The Mission focuses on development of basic urban infrastructure in the specified cities with the following expected outcomes: (i) universal coverage for access to potable water for every household; (ii) substantial improvement in coverage and treatment capacities of sewerage; (iii) developing city parks; and (iv) reform implementation and capacity building. To mitigate the problem in drinking water sector, the water supply component interalia, provides for rehabilitation of old water supply systems including treatment plants and rejuvenation of water bodies, specifically for drinking water supply and recharging of groundwater. Recycling/reuse of waste water, reduction of non-revenue water and exploring possibilities for septage management, are some of the important features.

Heritage City Development

The National Heritage City Development and Augmentation Yojana (HRIDAY), a central sector scheme of the Government of India was launched in 2015 with the aim of bringing together urban planning, economic growth and heritage conservation in an inclusive manner with the objective of preserving the heritage character of each Heritage City. By November 2018 and after a total outlay of ₹ 500 crore, the scheme is being implemented in 12 identified cities, namely, Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal.

Deendayal Antyodaya Yojana

Ministry of Housing and Urban Affairs has been implementing a centrally sponsored scheme Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) since 2013 for reducing the poverty and vulnerability of urban poor households. The Mission covers all the statutory towns in the country, which are to be decided by the state as per local need and capability.

Its major components include: (a) Social Mobilization and Institutional Development (SM&ID), which envisages mobilisation of urban poor women, differentlyabled men and men in vulnerable occupations into thrift and credit-based Self-Help Groups (SHGs) and their federations/collectives; (b) Employment through Skill Training and Placement (EST&P) for skill development of urban poor in market-oriented courses to enable them to earn sustainable livelihoods; (c) Self-Employment Programme (SEP) provides interest subvention on loans to individuals/groups of urban poor for setting up self-employment ventures/micro-enterprises; (d) support to urban street vendors to support pro-vendor planning, development of vendors' market, credit enablement, socio-economic survey of street vendors, skill development and micro-enterprises development and convergence with social assistance under various schemes of the government; (e) Innovative and Special Projects (l&SP) to promote pioneering efforts, aimed at catalysing sustainable approaches to urban livelihoods through Public, Private and Community Partnership (PPCP).

The Real Estate (Regulation and Development) Act, 2016

Real Estate (Regulation and Development) Act, 2016 (RERA) was passed by the Parliament in March 2016, heralding a new era of transformation in the real estate sector. The core objective of this transformative legislation is to ensure regulation and promotion of real estate sector in an efficient manner and to protect the interest of home buyers. The Act is applicable to all the states/UTs, except Jammu & Kashmir. Most of the states/UTs have notified the Real Estate (Regulation and Development) Rules. 4 North-Eastern states have initiated the process of notifying the rules under RERA. In last year, 9 Regular and Real Estate Appellate Tribunals have been set up by states/UTs. 21 states/ UTs have set up the Real Estate Appellate Tribunal. In the last one year, 15 more states have operationalised online web portals under the provisions of RERA. About 23 states/UTs have operational ised online web portals. More than 40,000 Real Estate Projects and 31,000 Real Estate Agents have been registered under RERA across the country.

Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014

The objective of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, is to protect the rights of urban street vendors and to regulate street vending activities. States/UTs (with legislature) are the appropriate government for framing of Rules and Schemes under the Act for their respective states/UTs. Ministry being the appropriate Government for UTs (without Legislature) has framed Rules and Schemes under the said Act.

Urban Transport

A city can be productive if it has a sound infrastructure and good services. Urban Transport is a crucial component of urban infrastructure. It provides access to opportunities, supports urban economic activities, and facilitates social interactions. A good network of roads and an efficient mass urban transport system make significant contributions to improve the working efficiency of a city and its environs. The extent to

which the Indian cities can maximise economic performance and reduce poverty will be closely linked to how efficiently their transport system moves people and goods upon which their socio-economic activities depend. The rapidly growing urban population exerts an increasing pressure on the urban transport system resulting in deterioration of urban transport system thus lowering economic productivity. Hence, development of cities through prioritising urban transport is a step forward in this direction. Global experience has also shown that an efficient shift to Public Transport can occur only if urban transport is assimilated at the conception stage of land-use and urban planning.

Ministry of Housing and Urban Affairs (MoHUA) is the nodal ministry for planning and coordination of Urban Transport matters at the central level. However, technical planning of rail transport continues to be with Ministry of Railways. Similarly, road transport is the responsibility of the Ministry of Road Transport and Highways. However, the major responsibility for urban transport infrastructure and service delivery rests with state governments and local bodies.

National Urban Transport Policy

In order to deal with the emerging problems in Urban Transport, the Government of India formulated a National Urban Transport Policy in 2006. The policy seeks to promote integrated land use and transport planning, greater use of public transport and non-motorised modes of travel along with use of cleaner technologies. It offers central government's financial support for investments in public transport, infrastructure for greater use of non-motorised modes, as well as in the construction of parking facilities, including demonstrative pilot projects. It encourages capacity building at institutional and individual levels, innovative financing mechanisms, institutional coordination, association of the private sector and need for public awareness and cooperation.

Standardisation and Indigenisation of Metro Rail Systems

To promote indigenisation and reduction in cost, the specifications of various metro rail components like rolling stock, signalling systems, electrical and electro-mechanical components and civil engineering structures have been standardised. These mandatory parameters will ensure that metro rail sub systems for all new metro projects conform to the prescribed standards. Specific steps for promoting 'Make in India'

have also been stipulated in these standards. A standard eligibility criterion for procurement of rolling stock is also issued.

I-Metros (Indian Metro Rail Organisations' Society)

A platform to exchange ideas, pooling of knowledge and sharing of experience, best practices, innovations, etc., among the Indian metro rail companies to nurture excellence in performance, was launched in March 2018.

Metro Rail Policy

The policy was launched for ascertaining and enhancing the feasibility of metro rail projects from economic, social and environmental perspectives. It creates an ecosystem for the rapid development of metro rails in the larger cities under different models including public private partnerships and paves way for 'Make in India' products in the sector.

National Common Mobility Card

India's first indigenously developed payment ecosystem for transport based National Common Mobility Card (NCMC) was launched in March 2019. This will enable people to pay multiple kinds of transport charges, including metro services and toll tax, across the country. This inter-operable transport card allows the holders to pay for their bus travel, parking charges, retail shopping and even withdrawal of money.

Cost-effective Metro System

Standards for Light Urban Rail Transit System named "Metrolite" was issued by the Ministry in July 2019, the cost of which is likely to be lesser than that of high capacity metro rail system being developed presently in the country. This system is suitable for cities with lower projection of ridership. It can also be used as a feeder system to metro system. The Ministry has also standardised various metro rail components, viz., rolling stock, signalling and telecom systems, electrical and electromechanical systems and civil engineering structures to promote indigenisation.

18 India and the World

THE principal aim of India's engagement with the world is to ensure regional and global peace and stability thereby creating a conducive environment for continued economic growth and development. The year 2020 has been an especially challenging year for India, and for the world. The Covid-19 pandemic and the subsequent global lockdown pushed the world to the brink of recession. It triggered a rethink on the spread of global supply chains, and re-focused the world's attention towards non-traditional security threats that have the potency to fundamentally reshape the international system. Against this complicated global environment battered by the pandemic, practitioners of India's foreign policy have prioritised diversifying the country's strategic and economic options to ensure that India continues on its upward trajectory as a fast growing economy, with a rising profile in global affairs.

However, even as the crisis mandated the need for sustained communication between countries that sought to devise a coordinated global response to the trans-national challenge, serious challenges were posed to conventional modes of conducting diplomacy, with face-to-face meetings and major international summits having been cancelled. Diplomacy adapted to the new situation, with virtual meetings being the dominant mode of engagement. India remained at the forefront of such digital diplomacy, seeking to simultaneously advance and deepen relations with each bilateral or multilateral partner. The common threads that run through the entire gamut of India's international outreach over this period have been put together here.

The Ministry of External Affairs (MEA) also known as the Foreign Ministry, is the government agency responsible for the conduct of foreign relations of the country.

Website : www.mea.gov.in

During the year, the Ministry of External Affairs continued its pragmatic and outcome oriented engagements, to enhance India's security, uphold its territorial integrity, while promoting and facilitating

economic transformation. This was done in a proactive manner, through strengthened bilateral, regional and multilateral partnerships and by seeking to build influence in key global forums. The Ministry was able to transform the challenges posed by the pandemic to conducting diplomacy into an opportunity by starting global conversations using virtual platforms. For the first time, a bilateral virtual summit was held with Australia in June where Prime Ministers of both the countries participated.

Vande Bharat Mission

The pace of our outreach efforts with the Indian diaspora also continued, with characteristic vigour and innovative mechanisms. The Vande Bharat mission, launched to repatriate Indian nationals stranded overseas in the wake of the pandemic and global lockdowns, has been the largest exercise of its kind ever undertaken by the government and has demonstrated a capacity to effectively carry out complex humanitarian missions. Over one million Indians have returned under the mission so far through flights, across land borders and on naval ships. India has also been able to facilitate the return of Bhutanese and Nepalese nationals stranded in third countries to their homes on Vande Bharat flights.

Bilaterally, Prime Minister's engagements with the United States, France, Japan, Australia, China, Russia, United Arab Emirates, Saudi Arabia and high level visits to Africa, Latin America and the Caribbean, as also to the Central Asian Republics, are illustrative of a new phase in the expansion of India's diplomatic engagements.

Indo-Pacific Policy

India's broadening horizons on maritime issues were postulated through presentation of a six-point Indo-Pacific policy, reinforcing our concept of Security and Growth for All in the Region (SAGAR). India launched Mission SAGAR, and sent Indian Naval Ship Kesari to Maldives, Mauritius, Madagascar, Comoros and Seychelles, carrying on board two medical assistance teams, consignments of Covid-19 related essential medicines and food items.

India played a pioneering role in climate change and global warming issues. As on July 30, 2020, 87 countries had signed the Framework

Agreement of the International Solar Alliance and of these 67 had deposited their instruments of ratification. The International Solar Alliance was also launched jointly by India and France during COP21 in Paris.

Neighbourhood First

India's policy of 'Neighbourhood First' continued to be accorded the highest priority, with a focus on creating mutually beneficial, people-oriented, regional frameworks for stability and prosperity. The pace of bilateral engagements was maintained and the focus was on making progress on the execution of infrastructure and connectivity projects. Projects in rail, road, ports, inland waterways, shipping and energy and fuel transmission are being implemented with Indian partners in the neighbourhood. Several cross-border connectivity projects under Indian assistance are at varying stages of implementation, especially with Bangladesh, Myanmar, Nepal, Sri Lanka and Afghanistan. Their speedier conclusion will enhance regional connectivity and promote seamless flow of goods and services between India and its immediate neighbourhood.

Out of the total LoCs of USD 30.66 billion, USD 15.90 billion have been extended to Asian countries, with the largest value of commitments having been made in India's immediate neighbourhood. LoCs worth USD 7.862 billion have been extended to Bangladesh; USD 2.02 billion to Sri Lanka; USD 1.65 billion to Nepal; USD 964.80 to Mauritius; USD 840 million to Maldives; USD 538.90 million to Myanmar; and USD 128 million to Seychelles. India also accorded its immediate neighbourhood the highest priority when it came to coordinated efforts against Covid-19. At the Video Conference of SAARC Leaders on combating Covid-19 in March 2020, a USD 10 million Covid-19 Emergency Fund was announced which became operational to deliver urgent medical supplies, equipment and humanitarian assistance to the SAARC neighbours.

Rapid Response teams were also deployed comprising doctors, nurses and paramedics in the Maldives and Kuwait, and, Medical Assistance Teams to Mauritius and Comoros. India has been using e-ITEC network to share expertise and has developed a 'SAARC Covid19 Information

Exchange Platform (COINEX)' for use by health professionals of all SAARC countries.

Strategic Autonomy

With strategic autonomy at its core, India continued to step up its engagement with all the major powers of the world, taking independent decisions in its national interest. The "informal summit" with China in Chennai was an important milestone, as was the trilateral Russia-India-China Summit in Moscow. India and the US continued to consolidate their comprehensive global strategic partnership through two landmark meetings at the highest level in Washington DC in September 2019 and New Delhi in February 2020. India reaffirmed its commitment to its quadrilateral partnership with the US, Japan and Australia, and its Japan-India-America (JAI) trilateral relations.

The year 2020 saw India, France and Australia hold their first trilateral meeting, vowing to strengthen their cooperation in the Indo-Pacific region. During the India-Australia virtual bilateral summit, the Mutual Logistics Support Agreement was signed, in an effort to increase interoperability between the Indian and Australian forces. In September, India and Japan also signed the Acquisition and Cross-Servicing Agreement, allowing the militaries of the two countries to exchange supplies and services on a reciprocal basis.

Act East Policy

The Act East policy received a boost with the renewed global emphasis on the Indo-Pacific region. India's sustained engagement with the Indo-Pacific region is evident from the continued exchange of high-level visits, defence and security cooperation, including on counterterrorism and other transnational crimes; comprehensive economic engagement; regular dialogues on education and skill development; capacity building through scholarships and ITEC programmes; cultural cooperation including promotion of Indian culture through Indian cultural centres and growing ties with the diaspora. India and ASEAN have stepped up cooperation to boost maritime cooperation and physical, digital and cultural connectivity. There is also deepening synergy on non-traditional security issues like terrorism, cyber-security,

and environmental threats. India has engaged with the United States, Australia, Japan, the Republic of Korea, New Zealand, and Vietnam to enhance cooperation among Indo-Pacific countries for responding to the complex challenges presented by the Covid-19 pandemic.

Think West

India's outreach to the Gulf and West Asian countries has become an increasingly important pillar of foreign policy. Engagement with Africa, both in political and economic terms, has also intensified as never before. The Duty Free Tariff Preference (DFTP) Scheme announced by India has benefitted African nations by extending duty free access to 98.2 per cent of India's total tariff lines. Thirty-eight African countries benefit from the DFTP Scheme. India has become the fifth largest investor in Africa with cumulative investments of USD 54 billion.

High Level Visits

Starting from May 2019, at the level of Heads of State and Government, the year under review witnessed, inter alia, incoming visits by the Presidents of Bangladesh, Kyrgyz Republic, Sri Lanka, Myanmar, Zambia, Mongolia, China, Brazil, the USA, Portugal and, Prime Ministers of Bhutan, Nepal, Mauritius, Bangladesh and Portugal. Similarly, outgoing visits included those by the Indian President to Benin, Gambia, Guinea, Philippines, Japan and Brazil. The Prime Minister visited Japan, Kyrgyz Republic of Maldives, Sri Lanka, France, UAE, Bahrain, Bhutan, Bangladesh, Russia, the USA, Saudi Arabia and Thailand.

Recently, the Prime Minister also participated in the NAM Contact Group on Covid-19. In addition, the Prime Minister addressed the Extraordinary Virtual G20 Leaders Summit in March 2020 where he emphasised the need to put human beings, rather than economic targets, at the centre of the vision of global prosperity and cooperation. India has been preparing for its G20 Presidency for 2023.

The world stood in solidarity with India in the wake of the Pulwama terrorist attack. India reiterated its commitment to combating the menace of terrorism at the global level and strongly condemning it in all its forms and manifestations. India continued to hold structured

consultations through the Joint Working Groups on Counter Terrorism with various partner countries. At the multilateral level, India continued to contribute to shaping the global agenda on an array of cross-cutting issues such as climate change, nuclear non-proliferation and black money.

Cognizant of the evolving security landscape, the MEA has added new divisions that deal with counter terrorism, new and ermerging technologies and cyber issues. The international order has faced immense disruptions due to the ongoing health crisis brought about by the pandemic. India is interested in strengthening the global ecosystem of digital health technologies to promote health outcomes. India hosted the 4th Global Digital Health Partnership Summit in February 2019.

Diplomacy for Development

Domestic transformation has been made integral to India's foreign policy strategy. Intensified engagements with partners have brought visible economic benefits to the people of India, through enhanced foreign investment and technology tie-ups, leading to the setting up of factories and creation of jobs. This dovetailing of diplomacy with development and prosperity has led to forging of foreign collaborations for promoting schemes of national renewal, including programmes like - Make in India, Skill India, Smart Cities, Digital India and Start-up India.

Pravasi Bharatiya Diwas

The Pravasi Bharatiya Diwas celebrations at Varanasi in 2019 further strengthened the bonds between the Diaspora and their homeland. Pravasi Bharatiya Diwas 2020 was held in New Delhi on January 9, 2020 in which EAM interacted with Diaspora in eight countries through video conference. The event was webcast live to all Indian Missions and Posts abroad.

The emphasis of the government on service delivery and citizen-centric governance is reflected through steps to implement four Mission Mode Projects of e-Kranti (fourth pillar of Digital India Programme) namely e-Office, e- Procurement, Immigration, Visa, Foreigner's Registration, and Tracking System (IVFRT) and Passport Seva Projects (PSP). These are operational in the MEA and Missions/Posts abroad. A

number of e-governance and automation projects have also been undertaken by the MEA in consonance with the aims and objectives of Digital India such as Foreign Service Institute Alumni Portal, e- Audit Portal, Revamped Know India Programme and Pravasi Bharatiya Divas Portals, Diplomatic Identity Card Registration and Issuance System, etc. The MEA also recently launched its performance dashboard to bring transparency and accountability across different aspects of its functioning.

Neighbourhood

Afghanistan

The multifaceted strategic partnership between India and Afghanistan witnessed continued strengthening. Between 2014 and 2019, bilateral trade crossed USD 1.15 billion as a result of initiatives including 'Air Freight Corridor.' Afghanistan also started its exports to India through the Chabahar Port, the operations of which were taken over by India Ports Global Ltd., in December 2018. India remains Afghanistan's most crucial development and capacity building partner, with a wide array of training and scholarship programmes for Afghans including under ITEC. A special capacity building programme for Afghanistan Central Civil Registration Authority was organised by the Registrar General & Census Commissioner, India and Unique Identification Authority of India in December 2019. As a key development partner, India has completed over 400 projects in all the 34 provinces of Afghanistan.

India allocated ₹ 400 crore in grants and loans to Afghanistan and disbursed ₹ 408.12 crore in 2019-20. India also provided timely assistance in the form of medical and food supplies to Afghanistan to aid its fight against the pandemic. Cooperation was scaled up, including in the areas of security, connectivity; and promotion of friendly exchanges was deepened. India worked closely with Afghan authorities to facilitate the arrival of some Hindu and Sikh Afghan families to India, following religious persecution and terrorist attacks that targeted minority communities in that country. India participated in the inaugural session of the intra-Afghan negotiations held in Doha in September 2020. India has voiced its support for an Afghan-led, Afghan-owned and Afghan-controlled peace process. New Delhi remains committed in its support to

promoting peace, security, unity, sovereignty, plurality and democracy in Afghanistan.

Bangladesh

India-Bangladesh relations have for some years now expanded in depth and complexity. The year under review was punctuated with multiple high level bilateral visits, signifying the importance of this relationship. Bangladesh has become India's largest development partner, and its largest trade partner in the region with total trade at around USD 10.3 billion. With Dhaka, India has the most extensive government to government relationship, with over 75 separate dialogue mechanisms. At the level of people to people ties, India's largest visa operation is in Bangladesh. Lines of Credit worth USD 7.862 billion have been extended to Bangladesh—largest value of commitment made by India to any country.

Development projects such as Rampal Maitree Power Plant, India-Bangladesh Friendship Pipeline, and rail links between Akhaura-Agartala and Chilahati-Haldibari and Khulna-Mongla rail line are nearing completion. These efforts are important for enhancing connectivity between the two countries, especially given that there are more visitors from Bangladesh to India, than from any other country. Protocol on Inland Water Transport and Transit was operationalised to improve inland water port facilities at key locations, such as the major river junction of Ashuganj. This is expected to provide further ballast to bilateral trade. In July 2020, India handed over 10 Broad Gauge locomotives to Bangladesh as grant assistance. India has also provided five tranches of aid to the camps in Cox's Bazar area through the Government of Bangladesh. India has extended Covid-19 related assistance to Bangladesh, including organising capacity building courses for Bangladesh medical personnel. The year 2021 will mark 50 years of the liberation of Bangladesh and the establishment of diplomatic ties between India and Bangladesh. India plans to issue a commemorative stamp on Bangabandhu during *Mujib Barsho.*

Bhutan

India and Bhutan saw four high level bilateral visits in 2019-2020, including the Prime Minister's visit to Bhutan in August 2019. During the trip, the RuPay card was inaugurated in Bhutan, in addition to the

opening of South Asia Satellite's ground earth station. The two sides have been working on enhancing their cooperation in the education, space and healthcare sector. Hydro power cooperation remains at the core of the relationship. The 720 MW Mangdechhu hydroelectric project was jointly inaugurated by Prime Ministers of both the countries. The Concession Agreement for the 600 MW Kholongchhu (Joint Venture) Hydroelectric Project was signed in June 2020 in Thimphu. Among key future projects, the Sankosh Hydro-electric project is one that India and Bhutan plan to work on soon.

China

Indian Prime Minister and the President of the People's Republic of China held their Second Informal Summit in Chennai, India in October 2019. The leaders reiterated that both sides will prudently manage their differences and not allow differences on any issue to become disputes. While the year 2020 marks the 70th anniversary of the establishment of diplomatic relations between India and China, the year also witnessed heightened tensions in the India-China border areas. Both India and China agree that the boundary question is a complex issue which requires patience and have committed to seeking a fair, reasonable and mutually acceptable solution through dialogue and peaceful negotiations. The two sides also agree that maintenance of peace and tranquility in the border areas is an essential basis for the further development of bilateral relations.

Myanmar

India and Myanmar continued on the positive trajectory of their bilateral ties during the year under review. Myanmar's President visited India twice in 2019 and 2020. During this visit, in February 2020, ten agreements were signed. The MoUs concern cooperation across a wide array of areas including development partnership, prevention of human and wildlife trafficking, development assistance to the Rakhine state, health research. India has provided assistance for three rail, one road, three power transmission and two telecom projects. Both sides welcomed the appointment of a Port Operator to operate and maintain the Sittwe Port and Paletwa Inland Water Transport Terminal. To facilitate the easy movement of passenger and cargo traffic between the two countries, two

land border crossing points at Tamu-Moreh and Rihkhawdar-Zowkhawthar were opened as international border gates in August 2018.

Maldives

India-Maldives bilateral relationship saw rapid expansion during the year. PM's visit to Maldives in June 2019 followed Maldivian President's visit to India in December 2018. Several LoC and grant projects were implemented, and new capacity building initiatives were taken in new areas of cooperation including aviation security, firefighting, national security guards, special protection groups, etc. During the PM's visit, key MoUs were signed in the fields of hydrographic, healthcare and connectivity. In December 2019, four projects were launched and gifted to the people and government of the Maldives. These included installation of streetlights in Male, launch of RuPay card, gifting of CGS *Kamiyaab* and MoUs on setting offish processing plants in Addu Atoll. LoCs worth USD 840 million have been extended to the island nation. In August 2020, India announced its decision to support the Greater Male Connectivity Project through a grant of USD 100 million and a LoC of USD400 million.

Maldives and India share strong cultural ties, and Male is New Delhi's key partner in ensuring a free, open and secure Indian Ocean Region. In this regard, our defence cooperation has also strengthened over the last year, with the fourth annual joint military-to-military talks held in July 2019. Progress has been made in the construction of the Institute for Security and Law Enforcement Studies. Maldives has been the largest recipient of India's Covid-19 related assistance. India had also pledged to extend urgent financial assistance to the Government of Maldives, by way of a soft loan arrangement.

Pakistan

The movement in bilateral relations remained constrained owing to the continuing support in Pakistan to cross-border terrorism against India and absence of any credible action on the ground against infrastructure of support to terrorism in areas under Pakistan's control. The heinous terrorist attack in Pulwama, Jammu and Kashmir, on 14 February 2019, was executed by the Pakistan-based and UN-proscribed terrorist group Jaish-e-Mohammed (JeM). Pakistani forces continued, with increased incidents of unprovoked ceasefire violations, and aided terrorist

infiltration, along the Line of Control and International Border causing loss of lives of innocent civilians. Islamabad continues to display an obsessive compulsion to comment on India's internal affairs, including on the formation of union territory of Jammu and Kashmir which is an integral part of India. India, as part of its consistent policy, has expressed its desire to have normal relations with Pakistan in an environment free from terror and violence, and called upon Islamabad to create a conducive environment for the same.

The Government of India took the initiative to put in place state-of-the-art infrastructure and opened the Kartarpur Sahib Corridor on the auspicious occasion of the 550th Birth Anniversary of Guru Nanak Dev ji in November 2019. This allowed pilgrims to undertake visits to the Gurudwara Kartarpur Sahib in Pakistan. The Government of Pakistan is, however, yet to build the bridge across Budhi Ravi Channel which would facilitate safe movement of pilgrims. Persistent efforts were made to move ahead on issues related to prisoners and fishermen.

Nepal

India-Nepal relations derive strength and salience from age-old cultural and religious ties, close people-to-people contacts, multi-faceted economic and development partnership, reinforced by open borders. Intensive bilateral engagements, including high-level visits between the two countries, continued in 2019-2020. In September 2019, Prime Ministers of both the countries jointly inaugurated South Asia's first cross-border petroleum products pipeline from Motihari in India to Amlekhgunj in Nepal. India-Nepal developmental partnership has involved 43 road projects and 4 transmission line projects. India and Nepal have also been working in the areas of agriculture, inland waterways and railways. The Gorkha Housing Reconstruction Project which has received substantial funding from India is also nearing completion.

Sri Lanka

India-Sri Lanka relations flourished over the year, marked by multiple high level bilateral visits. Bilateral trade between the two countries reached USD 6.2 billion. A new USD 400 million line of credit was announced during Sri Lankan President's visit to India in November 2019 that will give a boost to infrastructure and development in Sri Lanka.

Under the Indian Housing Project, 46,000 houses have been constructed for the internally displaced in the Northern and Eastern Provinces of Sri Lanka. Progress has been made in the construction of 14,000 houses for Tamils of Indian origin in the Up-Country region. The two countries also pledged to enhance cooperation in the area of renewable energy, with the decision to use the previously announced USD 100 million credit line for solar projects in Sri Lanka. Prime Minister was the first world leader to visit Sri Lanka immediately after the aftermath of the tragic Easter Sunday bombings in 2019. A special Line of Credit of USD 50 million was announced to aid Sri Lanka's fight against terrorism.

Mauritius

The relations between India and Mauritius experienced an intensive engagement, in keeping with the tradition of cementing close political, economic, cultural and diaspora linkages. The year 2019 saw the Prime Minister visiting India twice. The same year also saw the inauguration of two projects implemented by India: ENT Hospital Project and the first phase of age Metro Express Project. INS Shardul and INS Darshak paid friendly visits to Mauritius to undertake joint hydrographic survey on the request of the Mauritian government. In July 2020, India and Mauritius jointly inaugurated Mauritius' new Supreme Court building. This project has been completed with grant assistance of USD 28.12 million from India. In the wake of the catastrophic oil spill off Mauritian coast in August 2020, India dispatched 30 tonnes of technical equipment and material to supplement oil spill containment operations.

Seychelles

India and Seychelles maintained the strong friendship, cooperation and understanding that defines their relationship. Several high ranking officials from the Seychelles visited India in 2019 to expand cooperation in various demands. Many of the projects under the MoU on Small Development Projects signed in June 2018 were tendered in 2019. Several solar PV installation and commissioning projects were completed in 2019. Defence and security cooperation was deepened with the visits of INS Shardul, Sujata, Magar, Tarangini/Sudarshini, Kochi and Darshak and Indian Coast Guard Ships Sarathi and Vikram during this period.

Indian Ocean Rim Association

Indian Ocean Rim Association (IORA) plays a key role in facilitating dialogue based approaches to seek a safe, secure and stable region that delivers shared prosperity for all. At the 21 st IORA Committee of Senior Officials held in Abu Dhabi, UAE in November 2019, mid-term review of IORA Action Plan 2017-2021 was discussed, and it was decided to continue the review at the next IORA Committee meeting of Senior Officials as well as consider the new IORA Action Plan 2021-2025.

South East Asia and Indo-Pacific

Under India's Act East Policy (AEP) launched in 2014, India has been engaging robustly with countries in Southeast Asia region, Oceania, Northeast Asia and East Asia. The region is the fulcrum of India's vision for a free, open, inclusive and prosperous Indo-Pacific. India has repeatedly emphasised the centrality of ASEAN to the Indo Pacific, and has proactively engaged with the region, building on the historic and civilisational ties it shares with South East Asia. India's relationship with Australia gathered immense strength over the years. India's outreach to Canberra is essential for peace and stability in the Indo-Pacific. As the pandemic disrupted conventional democracy, India held the first ever a bilateral virtual summit with Australia, in June 2020. During this meeting, India and Australia decided on a Shared Vision for Maritime Cooperation in the Indo-Pacific region to harness opportunities and meet challenges together as Comprehensive Strategic Partners. The first India-France-Australia Trilateral Dialogue was also held virtually in September 2020 with an aim to enhance joint cooperation in the Indo-Pacific. India is also actively engaged with New Zealand and Pacific Island countries (PICs) through political understanding, security and defence cooperation, and economic engagement.

Association of Southeast Asian Nations

In accordance with its 'Act East Policy,' India has boosted ties with the ASEAN Member States across political, security, economic and cultural spheres. There is increasing emphasis from both India and ASEAN to deal with non-traditional security issues like terrorism, cyber-security, and environmental threats. In ASEAN-lndia Ministerial meeting in September 2020, the status of ASEAN-lndia Strategic Partnership was reviewed in several areas including maritime cooperation, connectivity,

education and capacity building and people-to-people contacts. The Meeting also reviewed the preparations for the upcoming 1 7th ASEAN-lndia Summit and also the progress in the implementation of key decisions of the Leaders of ASEAN Member States and India arrived at the 16th ASEAN-lndia Summit held in Bangkok in November 2019 and the previous Summits. India has made concerted efforts to boost connectivity in physical, digital and cultural spheres with individual ASEAN countries.

East Asia

Democratic People's Republic of Korea

Since its inception in 1973, the bilateral and diplomatic relations between India and Democratic People's Republic of Korea (DPPK) have been cordial and mutually beneficent. The Government of India extended medical assistance worth about USD 1 million to DPRK in July 2020.

Japan

India-Japan relationship has been transformed into a partnership with great substance and purpose and is a cornerstone of India's Act East Policy and Indo-Pacific vision. India-Japan Special Strategic and Global Partnership continued making strides in 2020, when the armed forces of the two countries signed the Agreement on Reciprocal Provision of Supplies and Services. The Agreement will further enhance the depth of defence cooperation between the two countries and contribute to peace and security in the Indo-Pacific region.

Republic of Korea

India-Republic of Korea (ROK) bilateral relationship, elevated to the level of Special Strategic Partnership and gathered further momentum. Indian Prime Minister visited Seoul in February 2019 to receive the Seoul Peace Prize. Defence Minister also visited Seoul in September 2019. Bilateral trade amounts to around USD 21 billion, and the two plan to expand their trade relations to around USD 50 billion by the year 2030.

Mongolia

India's traditionally friendly and cordial relations with Mongolia have steadily improved over the years, following the Prime Minister's historic visit to Mongolia in May 2015 when bilateral relations were upgraded to

Strategic Partnership. In 2019, Mongolian President paid a state visit to India in September. This was the first Presidential visit from the Mongolian side in almost a decade.

Eurasia

Russia

The 'special and Privileged' Strategic relationship with Russia, constitutes an important dimension of India's foreign policy. Prime Minister visited Vladivostok in September 2019 to hold the 20th India-Russia Annual Bilateral Summit and participate in the 5th Eastern Economic Forum as the Chief Guest at the invitation of Russian President. This year also saw Russia conferring its highest state honour, the Order of St Andrew, the Apostle, on Indian Prime Minister in April 2019. In September 2020, India participated in the virtual meeting of BRICS Ministers of Foreign Affairs under Russian Chairmanship. BRICS member states called for a reformed multilateral system, including the UN, the WTO, the WHO, the IMF and other international organisations. This was followed by a meeting of the Russia-India-China Foreign Ministers in Moscow.

Central Asia

India's outreach with its extended neighbourhood of Central Asia saw further progress with the visit of the President of Kyrgyz Republic to India and that of Indian Prime Minister to Kyrgyz Republic in 2019. The year also saw multiple foreign minister level interactions with Tajikistan and Turkmenistan.

South Caucasus

India's relations with Azerbaijan, Georgia and Armenia continued in an upward trajectory. India and Azerbaijan continued to have productive exchanges with the visit of the Vice President to Baku for the 18th Summit of the Non Aligned Movement. Prime Minister participated in the online Summit of NAM Contact Group, hosted by Azerbaijan in May 2020 to discuss the response to the pandemic. Prime Minister met his Armenian counterpart in September 2019, on the sidelines of the High Level Segment of the 74th United Nations General Assembly in New York. The need to considerably enhance the volume of bilateral trade and

investment was noted, and India offered development partnership assistance to Armenia based on its needs.

Shanghai Cooperation Organisation

India has a historic relationship with all Shanghai Cooperation Organisation (SCO) countries. This relationship is anchored in mutual trust and goodwill, which are the main pillars of our multi-dimensional relationship. SCO Foreign Ministers met in Bishkek (Kyrgyz Republic) in May 2019 and in Moscow in September 2020. India has been taking active part in various SCO dialogue mechanisms under the Chairmanship of the Russian Federation in 2020. The SCO meeting in Moscow reviewed the preparations for the forthcoming SCO Summit.

The Gulf and West Asia

Gulf

India has a close and strong relationship with the Gulf region which has remained a region of prime importance for India's extended neighbourhood. The bilateral friendly ties with each of the Gulf countries are deep-rooted in a shared history and have been constantly nourished through growing multi-dimensional cooperation and vibrant people-to-people engagement. The Gulf is one of India's top trading partners with bilateral trade of over USD 150 billion in 2018-19. It is the source of more than 50 per cent of oil and gas needs, and hosts a 9 million strong Indian community and contributed an annual remittance of over USD 48 billion in 2018 (out of total remittances to India of 78.6 billion dollars).

In 2019-20, close political ties with the countries in the region continued to grow. The visit of Saudi Crown Prince strengthened the bilateral partnership and opened avenues for enhanced cooperation and prospects of increased Saudi investments in India's infrastructure. PM visited Bahrain (first ever Indian PM visit to the nation) and UAE in August 2019, where he was conferred their respective nations' highest civilian awards. India-UAE Joint Commission Meeting Trade, Economic and Technical Cooperation at Foreign Ministerial level was held in August 2020.

Iran

The 19th session of the Joint Commission at the level of External Affairs was held in December 2019 after a gap of four years. Both sides agreed on building upon the success achieved in operationalising Chabahar port for promoting regional connectivity.

West Asia and North Africa

West Asia and North Africa (WANA) continues to remain important from energy security, food security and for global peace and security. Relations with all the countries of the WANA region were taken forward in a calibrated manner, through the regular holding of institutional dialogue mechanisms and high-level exchange of visits. This region is a primary source of rock phosphates and its derivatives, and potash—the key raw materials for the production of various fertilisers. More than 80 per cent requirements of rock phosphates are sourced from the countries in this region. This region is also rich in minerals. India intensified its efforts to further secure its energy interests in the region. New Delhi forged greater defence and security cooperation with most of the countries in the region through formal and informal mechanisms that include intelligence sharing; counter-terrorism; cyberspace, etc. India has enhanced its cooperation with Djibouti, Somalia and other countries in the region to secure their interest in the areas of anti-piracy and maritime security. The Government of India conferred its second highest civilian honour, the Padma Vibhushan on the President of the Republic of Djibouti in March 2019.

Africa

East & South Africa

Many of the world's fastest growing economies are in Africa and the combined GDP of the continent is USD 2.4 trillion. By 2030, Africa will represent almost a quarter of the world's workforce and consumers. India's relationship with Africa has been advanced using consultative and responsive mechanisms under the rubric of India-Africa Forum Summit. The high-level political engagements were supported by regular holding of institutional mechanisms, including at the ministerial level. In order to have a more meaningful diplomatic presence in Africa, India has decided to open 18 new embassies/high commissions there in the next 4 years

which will take the number of Indian Missions there to 47. In this context, 9 new Indian Missions in Africa have already been opened this year. India's development assistance in the region includes key projects such as power projects and dams in Sudan and Rwanda; water treatment in Tanzania; sugar factories in Ethiopia; and technology parks in Mozambique and Swaziland. India interacted with South Africa through BRICS and IBSA forums. The year 2020 also saw Defence Ministers and Heads of Delegation from African countries meet the Defence Minister of India during the first ever India Africa Defence Ministers' Conclave during the DEFEXPO INDIA 2020 in Lucknow. India's contribution to defence and security in the Africa includes setting up of Defence Academies and Colleges in Nigeria, Ethiopia and Tanzania; deployment of training teams in several African countries including Botswana, Namibia, Uganda, Lesotho, Zambia, Mauritius, Seychelles, Tanzania; goodwill ship visits; and provision of defence equipment and ammunition and various other measures, including Defence Training Programmes.

West Africa

The region (covering 25 countries of west, north-west, central and south-west Africa) is home to Africa's largest population and fastest growing economies with largest proven reserves of energy resources and minerals. The region is rich in all known minerals. India sources about 18 per cent of its crude oil requirements from this region (Nigeria alone accounts for 11-12 per cent). India imports over USD 2 billion worth of gold from Ghana per year. India also sources a significant amount of raw cashew nuts from countries in the region including Cote d'lvoire, Guinea-Bissau and Senegal.

Terrorism continues to pose a grave challenge in the Sahel and Western Africa. There has been better coordination and synergy of efforts amongst the countries of the region to deal with the threat of terrorism. These efforts include the Joint Force of the Group of Five for the Sahel (G5 Sahel) or FC-G5S established by Burkina Faso, Chad, Mali, Mauritania and Niger. India has been contributing troops including military observers and police personnel for MONUSCO (UN Stabilization Mission in the Domestic Republic of Congo).

India's relations with countries in the West Africa (WA) region continued to expand and diversify during the year. The period was marked by several high-level bilateral visits and meetings. In August 2019, the Indian President visited Benin, Gambia and Guinea shortly after India welcomed the Zambian President. During the President's trip, it was decided to reallocate Indian line of credit of USD 92 million for infrastructure projects as well as extend assistance to support capacity building for revival of cottage industry and solar energy projects to install 300 solar home systems and 20 solar water pumps in Gambian villages.

In Benin, India announced USD 100 million as a fresh Line of Credit for various development projects in Benin where MoUs on cooperation in the field of export credit and investment insurance were signed. Possibilities of further enhancing defence cooperation were also discussed, including capacity building under the ITEC. Development assistance in renewable energy was discussed with Guinea. In December, the Foreign Minister of Guinea visited India. During EAM's visit to Niger in February 2020, he inaugurated Africa's first such convention centre dedicated to Mahatma Gandhi.

India's relationship with Nigeria remained robust during the year. With a bilateral trade turnover of USD 13.9 billion in 2019-20, India is Nigeria's largest trading partner, and Nigeria is India's largest trading partner in Africa. Indian and Nigerian navies have been collaborating extensively through information sharing and increase of surveillance for maritime security in the Gulf of Guinea. Counter terrorism, and battling insurgency and piracy are also important facets of our growing defence ties. Nigeria is a leading energy security partner of India, and both sides agreed to strengthen their cooperation in this sector including at government-to-government levels, during their foreign ministerial level bilateral meeting in September 2020. India and Nigeria also signed an MOU on Cooperation in Peaceful Uses of Outer Space in August 2020.

Europe and European Union

Central Europe

India continued with its policy of engaging with the countries of Central Europe (CE) to consolidate bilateral relations. On political

issues, there was good understanding, both at bilateral and multilateral forums. During 2019, close to 20 high level exchanges took place giving relations a further boost. EAM visited Poland and Hungary in August 2019, Finland in September 2019 and Serbia in November 2019. The presence of three HOS/HOGs at the Vibrant Gujarat Summit from CE countries was testament to the growing economic cooperation. The momentum continued through 2020, with visits from Hungarian and Czech Foreign Ministers in January 2020.

Western Europe

India's engagement with countries in Western Europe including France, Germany, UK, Italy, Ireland, Portugal, Spain, Netherlands, Andorra and Monaco witnessed an upswing during 2019-2020. This year was marked with a series of high level political visits which deepened the existing bilateral relationship. The Prime Minister visited France for the G7 Summit and the EAM visited several of these countries. India received the first Rafale fighter aircraft in October 2019.

In November 2019, India hosted German Chancellor along with her cabinet and business delegation for the 5th Intergovernmental Consultations during which 22 Agreements and MoUs were signed in diverse areas of cooperation. EAM visited the United Kingdom in July 2019 to attend the 19th Commonwealth Foreign Affairs Ministers Meeting, and later attended the Mediterranean Dialogues in December, organised by the Italian Ministry of Foreign Affairs and International Cooperation, in collaboration with the Italian Institute for International Political Studies. The year 2019 also saw the King and Queen of Netherlands visit India in October 2019, and the visit from Prince Albert II of Monaco in February 2019.

Portuguese Prime Minister visited India in December on an invitation extended by Prime Minister to attend the second meeting of the Organising Committee on the celebrations for the 150th Birth anniversary of Mahatma Gandhi.

European Union

The 15th India-EU Summit was held virtually in July 2020. The two sides decided to strengthen the Strategic Partnership, based on shared principles and values of democracy, freedom, rule of law, and respect for human rights and determination to promote effective multilateralism and

a rules-based multilateral order with the United Nations (UN) and the World Trade Organisation (WTO) at its core. The EU continues to be India's largest regional trading partner while India is the EU's 9th largest trading partner. India's bilateral trade in goods with the EU in 2018 stood at 91.5 billion Euros (USD 107.97 billion) comprising India's exports to the EU at 45.8 billion Euros (USD 54.0 billion) and imports at 45.7 billion Euros (USD 53.9 billion).

The Americas

North America

India and the United States continued to expand and develop their multifaceted and robust ties as 'natural allies'. There was significant progress in bilateral cooperation in areas such as defence, security, counter-terrorism, energy, science and technology, and people-to-people ties. Regular interaction at the leadership level continued to provide guidance and vision for taking forward the India-US Strategic Partnership. The year 2020 marked US President's first official visit to India when the relationship was upgraded to a 'Comprehensive Global Strategic Partnership.' The President was welcomed at the spectacular 'Namaste Trump' event in Ahmedabad. Similar dynamic energy defined the PM's visit to the US in September 2019, wherein he was received by the Indian diaspora at the "Howdy Modi" event in Houston. These landmark visits were in addition to meetings at the Ministerial levels and high-level dialogue mechanisms, such as EAM's visit to the US and Canada (in December 2019) and the India-US 2+2 Ministerial Dialogue. Aided by the growing convergence on strategic perspectives between the two sides, the India-US Strategic Partnership is playing an increasingly important role in enhancing peace, security, and stability in the Indo-Pacific region.

Latin America

India attaches importance to its relations with Latin America and the Caribbean region. The presence of more than one million Indian diaspora, which is culturally and emotionally attached to India, adds a special dimension to the relationship. Relations with Latin America and the Caribbean (LAC) region gained momentum in 2019-20. India's trade with the region reached USD 40 billion in 2019. The historic-cultural

linkages binding us with a vibrant and dynamic Indian diaspora of nearly 1 million in the Caribbean were buttressed further. The first ever India-CARICOM Leaders' meeting at PM level was held in September 2019 on the sidelines of UNGA. The meeting underscored India's firm commitment to strengthen its political, economic and cultural engagement with CARICOM.

United Nations and International Organisations

India continued its active engagements with international organisations including United Nations (UN), Non-Aligned Movement (NAM) and the Commonwealth. Indian Prime Minister accompanied by External Affairs Minister, Minister of State for External Affairs and other senior officials, led the Indian delegation to the High-Level Segment of the UNGA in September 2019. Prime Minister participated in the online Summit of NAM Contact Group, hosted by Azerbaijan in May 2020 to discuss the response to the pandemic. EAM visited the United Kingdom in July 2019 to attend the 19th Commonwealth Foreign Affairs Ministers Meeting. India is now looking forward to its term as a non permanent member of the UN Security Council, starting in January 2021. In May 2020, India was also elected as the Chair of the WHO's Executive Board.

India and Peacekeeping

India continued to push for greater priority to be given within the UN system for the global counter-terrorism effort. It was repeatedly highlighted that the international community needed to strengthen its legal framework that supported international counter-terrorism cooperation by reaching agreement on the Comprehensive Convention on International Terrorism (CCIT), and ensure greater transparency and effectiveness of existing UN counter terrorism structures. India has provided more than 2,00,000 troops and police personnel over the last 70 years. As on August 30, 2020, India is the fifth largest Troop Contributing Country (TCC) with 5,353 personnel, most of which are deployed in MONUSCO in DRC and UNMISS in South Sudan.

Counter Terrorism

The issue of terrorism found prominent mention in various bilateral and multilateral meetings at all levels in the wake of various incidents of terrorism that occurred in different parts of the world during the year. During all such interactions, India reiterated its commitment to combating the menace at global level and strongly condemned terrorism in all its forms and manifestations. India continued to hold structured consultations through the Joint Working Groups on Counter Terrorism with various partner countries. During 2019, India held CT dialogues with China, France, Canada, USA, Australia, Germany, Italy, Turkey, Uzbekistan, Russia, UK, Germany and participated in the BRICS Counter Terrorism Working Group meeting. Counter-terrorism also featured prominently in India's bilateral interactions with key partners in 2020.

Global Cyber Issues

Increasing use of Information and Communication Technology (ICT) for the social and economic development of nations has made cyber issues one of the significant subjects of diplomatic discussions around the world. In keeping with its profile, the MEA upscaled its Global Cyber Issues Cell to create the new Cyber Diplomacy (CD) Division which has been entrusted with the responsibility of projection and safeguarding of Indian interests on the subject in international fora. The MEA Performance Monitoring Dashboard was launched in August 2019. The dashboard is created on three target areas capturing all major schemes programmes and initiatives of the Ministry with many major indicators sliced and diced across five clusters (diaspora engagement, development of partnership, international engagement, trade and commerce, and citizen services). In addition to steering e-governance projects, the Ministry has also consistently pursued a focused approach to manage and mitigate overgrowing challenges of cyber security.

Consular, Passport and Visa Services

Issuance of passports has emerged in recent years as the most noticeable statutory and citizen service rendered by the Ministry of External Affairs. The Ministry has made many quantitative and qualitative improvements in the delivery of passport services. Indian Passports [together with other travel documents such as Identity

Certificates (IC), Emergency Certificates (EC) for returnees to India, Police Clearance Certificates (PCC) and Line of Control Travel Permits in Jammu & Kashmir] are issued by the Ministry through the Central Passport Organisation and its all India network of 36 Passport Offices, the CPV Division (only Diplomatic and Official Passports) and the Andaman & Nicobar Islands administration. The total number of Passport Seva Kendras functioning in the country was 51 7 as on December 31, 2019 including PSK and POPSK. For Indians living abroad, passports and Emergency Certificates are being rendered by 192 Indian Missions/Posts abroad.

India today is placed third behind China and the United States in terms of global passport issuance. The Ministry, in association with the Department of Posts, has taken an innovative initiative to open Passport Seva Kendras at the Head Post Offices (HPO)/Post Offices in the country to be known as 'Post Office Passport Seva Kendra' (POPSK).

Overseas Indian Affairs

The Overseas Indian Affairs Divisions are driven by the vision of development through coalitions in a world without borders. They seek to connect the Indian diaspora to India, and also to strengthen the institutional frameworks which provide for the support and welfare of overseas Indians. They provide information, partnership, and facilitation for all matters related to the Indian diaspora. The Divisions also engage in several initiatives which aimed at the diaspora, for the promotion of trade and investment, emigration, education, culture, health, and science and technology. The Ministry has strengthened the ecosystem that supports migrant workers in all stages of the migration cycle including pre-departure, in countries of destination as well as in return. This includes setting up of a broad-based institutional framework for welfare and protection of migrant workers and awareness generation through Pre-Departure Orientation (PDO) programmes.

19 Industry

THE Department for Promotion of Industry and Internal Trade (DPIIT) was established in 1995 and was reconstituted in 2000 with the merger of the Department of Industrial Development. Earlier separate Ministries for Small Scale Industries & Agro and Rural Industries (SSI&A&RI), and Heavy Industries and Public Enterprises (HI&PE) were created in October 1999. The Department was earlier called Department of Industrial Policy & Promotion; and was renamed DPIIT in 2019. In 2018, the matters related to e-Commerce were transferred to the Department and in 2019 the Department was given charge for matters related to internal trade, welfare of traders and their employees and start-ups.

The Department also handles matters related to Protection of Intellectual Property Rights (IPR) and administers six Acts related to IPRs. It also handles matters related to Foreign Direct Investment (FDI) and Investment by NRIs, and undertakes promotion of investment for industrial development of the country. There are five territorial divisions for international cooperation and industrial promotion handling matters emanating from Americas, Europe, CIS countries, Africa and Middle East, and Asia and Oceania.

The role and functions of the Department, primarily include: (a) formulation and implementation of industrial policy and strategies for industrial development in conformity with the development needs and national objectives; (b) monitoring the industrial growth, in general, and performance of industries specifically assigned to it, in particular, including advice on all industrial and technical matters; (c) formulation of Foreign Direct Investment (FDI) Policy and promotion, approval and facilitation of FDI; and (d) formulation of policies relating to Intellectual Property Rights in patents, trademarks, industrial designs and geographical indications of goods and administration of regulations, rules made thereunder.

The Department monitors the industrial growth and production, in general, and selected industrial sectors, such as cement, paper and pulp, leather, tyre and rubber, light electrical industries, consumer goods, consumer durables, light machine tools, light industrial machinery, light engineering industries etc., in particular. Appropriate interventions are made on the basis of policy inputs generated by monitoring and periodic review of the industrial sector. The Department studies, assesses and forecasts the need for technological development in specific industrial sectors. On this basis, it plans for modernisation and technological upgradation of the Indian industry so that, it keeps pace with the international developments in industrial technology on a continuing basis.

In tune with its role as a facilitator of industrial development and investment, the Department plays an active role in investment promotion through dissemination of information on investment climate and opportunities in the country and by advising prospective investors about licensing policy and procedures, foreign collaboration and import of capital goods, etc. The Department is also responsible for Intellectual Property Rights relating to patents, designs, trademarks and Geographical Indication of goods and oversees the initiative relating to their promotion and protection.

International cooperation for industrial partnerships is achieved through both bilateral and multilateral arrangements. At bilateral level, in addition to being nodal Department for Indo-Swedish, Indo-Libyan, Indo-Hungarian and Indo-Belarus Joint Commissions, the Department is represented on joint commissions and joint working groups with select countries. Similar initiative is also in place with the European Union.

Website : www.dipp.gov.in

National Manufacturing Policy

In order to bring about a quantitative and qualitative change and to provide necessary impetus to the manufacturing sector, the National Manufacturing Policy (NMP) was notified with the objective of enhancing the share of manufacturing in GDP to 25 per cent and creating 100 million jobs over a decade or so. The Policy is based on the principle of industrial growth in partnership with the states. The policy envisages

that central government will create the enabling policy framework; provide incentives for infrastructure development on a Public Private Partnership (PPP) basis through appropriate financing instruments; and state governments will be encouraged to adopt the instrumentalities provided in it.

National Investment and Manufacturing Zones (NIMZs) are an important instrumentality of the Policy. These zones have been conceived as large integrated industrial townships with state-of-the-art infrastructure; land use on the basis of zoning; clean and energy efficient technology; necessary social infrastructure; and skill development facilities, etc., to provide a conducive environment for manufacturing industries.

Manufacturing Clusters

The objective of the National Plan for Manufacturing Clusters is to bring about convergence in the multiple models of development of industrial clusters by the central and state governments so as to affect better cost efficiency and optimal utilisation of resources. Following this, DIPP has developed Industrial Information System (www.ncog.gov.in/IIS), a web-portal to capture information of all industrial clusters/zones/nodes/parks in existence and those which are in pipeline. The system has been developed in Open Source Software on the GIS layers developed by BISAG.

Foreign Direct Investment Policy

DPIIT is the nodal department for formulation of the policy on Foreign Direct Investment (FDI). It is also responsible for maintenance and management of data on inward FDI into India based on the remittances reported by the Reserve Bank of India. With a view to attract higher levels of FDI, a liberal policy has been put in place on FDI under which FDI up to 100 per cent is permitted under the automatic route in most sectors/activities. Significant changes have been made in the policy regime in recent times to ensure that India remains an increasingly attractive investment destination.

After abolition of the Foreign Investment Promotion Board (FIPB), process for granting FDI approvals has been simplified wherein the work relating to processing of applications for FDI and approval of the government thereon under the extant FDI Policy and FEMA is now

handled by the concerned ministries/ departments. However, DIPP is a single point interface of the government to facilitate investors for FDI through approval route. In this regard, a new portal (http://www.fifp.gov.in) has been created which is administered by this Department to facilitate clearance of applications which are through approval route. DIPP is the nodal department for approvals in case of single brand retail trading, multi brand retail trading, food product retail trading, non-resident Indian/export oriented units investments. Cases partaining to issue of shares against capital goods/ machinary/pre-operative and pre-incorporation expenses are also processed by DPIIT.

Investment Promotion

The Department plays an active role in investment promotion and facilitation through dissemination of information on investment climate and opportunities within the country and by advising prospective investors about investment policies and procedures and opportunities. International co-operation for industrial partnerships is solicited through both bilateral and multilateral arrangements. It also coordinates with apex industry associations like Invest India (National Investment Promotion and Facilitation Agency), Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian industry (CII), Associated Chambers of Commerce and Industry (ASSOCHAM), etc., in activities relating to promotion of industrial cooperation, both through bilateral and multilateral initiatives, intended to stimulate the flow of foreign direct investment into India.

Make in India

The initiative was launched in September 2014, as a national effort towards making India an important investment destination and a global hub for manufacturing, design and innovation. The programme is based on four pillars namely, new processes, new infrastructure, new sectors and new mindset. The initiative has been built on layers of collaborative effort of all stakeholders. Action plans were put in place for 21 sectors covering infrastructure, manufacturing and services. The action plans include initiatives for infrastructure creation; ease of doing business; innovation and R&D; fiscal incentives and skill development. Make in India initiative is now focused on 27 sectors—15 manufacturing sectors and 12 champion service sectors. The sectoral plans for manufacturing

sectors are coordinated in DPIIT while the sectoral plans for services are coordinated by the Department of Commerce in convergence with the Champion Services Sector initiative.

Public Procurement

The Public Procurement (Preference to Make in India) Order 2017 (PPP-Mll Order) was issued in 2017 pursuant to Rule 153 (iii) of the General Financial Rules 2017 as an enabling provision to promote domestic value addition in public procurement. This Order is applicable for procurement of goods , services and works (including turnkey works) by a central ministry/department, their attached/ subordinate offices, autonomous bodies controlled by the Government of India and government companies as defined in the Companies Act. Under the PPP-Mll Order, a Standing Committee, DPIIT has been constituted to review the implementation of order. A Public Procurement Cell has been created in the Department to monitor the grievances received for violation of PPPMII Order. 19 nodal departments have been designated for notifying minimum local content for the relevant product categories.

Ease of Doing Business

In order to improve the business environment in the country, the DPIIT has taken up a series of measures to simplify and rationalise the regulatory processes (registration and inspection processes) and introduction of information technology as enabler to make governance more efficient and effective. India ranks 63rd in the World Bank's annual Doing Business Report (DBR) 2020 as against 77th rank in the DBR 2019. The DBR ranks countries on the basis of Distance to Frontier, an absolute score that measures the gap between India and the global best practice on 10 specified indicators. India's absolute score improved from 67.23 in DBR 2019 to 71.0 in DBR 2020. The ease of doing business index is meant to measure regulations directly affecting businesses and a nation's rank is based on the average of 10 indicators, viz., starting a business; dealing with construction permits; getting electricity; registering property; getting credit; protecting minority investors; paying taxes; trading across borders; enforcing contracts; and resolving insolvency. States too have been brought on board in the process to expand the coverage of these efforts. DPIIT has been closely working with the state governments and UT administrations to help them identify

the constraints in doing business and improving the overall business environment. DPIIT launched an online portal to track implementation of reforms on a real-time basis. The same is available on www.eodb.dipp.gov.in.

The assessment of Business Reforms Acton Plan, 2017-2018 was released jointly by DPIIT and the World Bank in 2018 which can be accessed on www.eodb.dipp.gov.in. An 80-point Business Reforms Action Plan 2019 has been prepared and shared with states and UTs.

The Specific Relief (Amendment) Act, 2018 was put in place to further ease the conditions. The Specific Relief Act, 1963 is an Act to define and amend law relating to certain kinds of specific relief. As part of the government's endeavour to promote and improve 'ease of doing business', the said Act has been amended by the Specific Relief (Amendment) Act, 2018. The Amendment Act came into force on October 1, 2018.

Startup India

Startup India is a flagship initiative of the Government of India, intended to catalyse the startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India. Launched in 2016, Startup India has rolled out several programmes with the objective of supporting entrepreneurs, building up a robust startup ecosystem and transforming India into a country of job creators instead of job seekers. These programmes are managed by a dedicated Startup India team, which reports to DPIIT. Under the Startup India Scheme, eligible companies can get recognised as startups by DPIIT in order to access a host of tax benefits, easier compliance, IPR fast-tracking and other benefits.

Invest India

Invest India has been set up as a joint venture (not for profit) company between Department of Industrial Policy and Promotion, Federation of Indian Chambers of Commerce & Industry (FICCI), CM, NASSCOM and various state governments. Invest India is the National Investment Promotion and Facilitation Agency of India and acts as the first point of reference for investors. It is transforming the country's investment climate by simplifying the business environment for investors. Its experts, specialising across different countries, states and sectors, handhold investors through their investment lifecycle—from pre-

investment to after-care. This venture provides multiple forms of support such as market entry strategies, deep dive industry analysis, partner search and location assessment policy advocacy with decision-makers.

Project Monitoring - Invest India Cell

Project Monitoring Group (PMG) was set up in Cabinet Secretariat in 2013 and has recently been merged with DPIIT from 2019, with Invest India providing support. The PMG is now known as Project Monitoring - Invest India Cell (PMIC). It is an institutional mechanism for resolving of issues and fast-tracking the setting up and expeditious commissioning of large public, private and Public-Private Partnership (PPP) Projects. Any investor having issues or is likely to delay the execution of a project of estimated value of ₹ 1,000 crore and above (now this threshold has been reduced to ₹ 500 crore) can raise them on the portal before PMIC, which takes them up with the concerned authorities in the central or state governments.

Research Parks

Research Parks are being established at IIT Guwahati, Hyderabad, Kanpur, Kharagpur, IISc Bangalore, Gandhinagar, Delhi and Bombay to propel successful innovation through incubation and joint R&D efforts between academia and industry.

Promoting Startups in Biotechnology

With the aim to foster and facilitate Bio-entrepreneurship, Bio-clusters, Bio-Incubators, Technology Transfer Offices (TTOs) and Bio-Connect offices are being established in research institutes and universities across India. Seed fund and Equity Funding support is also provided to Bio-tech Startups under the initiative.

Mobile App and Startup India Portal

Startup India web portal and mobile app has been developed and operationalised since 2016.

Startup India Hub

Startup India Hub was operationalised in 2016 to resolve queries and handhold startups. A digital extension to Startup India Hub, an intelligent online hub was operationalised in 2017 which will serve as a platform where all the stakeholders of the startup ecosystem can collaborate and

synergise their efforts. It will facilitate location-wise and sectoral mapping.

Intellectual Property Rights

DPIIT is the nodal department for administration of various laws related to Intellectual Property Rights: patents; trade marks; industrial designs; Geographical Indications of goods; copyrights; and semiconductor integrated circuit layout designs. DPIIT is also the nodal department for vetting of MoUs for the Cabinet, etc., entered into by various ministries/departments of the Government of India from IPR angle, as also international negotiations on IPRs. DPIIT also is the nodal department for dealing with World Intellectual Property Organisation (WIPO). The office of the Controller General of Patents, Designs and Trademarks (CGPDTM), a subordinate office under DPIIT, carries out statutory functions related to grant of patents and registration of Trademarks, Designs and Geographical Indications. The registration of Copyrights is administered by the Registrar of Copyright Office, working under the CGPDTM. It functions out of offices situated in Delhi, Kolkata, Mumbai, Chennai and Ahmedabad, while the Central IP Training Academy is at Nagpur.

The Intellectual Property Appellate Board (IPAB), established in 2003, is the appellate tribunal to hear appeals against decisions of the Controller of Patents as also Registrar of Trade Marks and Geographical Indications. Under the Finance Act, 2017, the Copyright Board has also been merged in the IPAB. It is headquartered at Chennai.

National IPR Policy

The National IPR Policy lays the future roadmap for intellectual property in India. The Policy recognises the abundance of creative and innovative energies that flow in India, and the need to tap into and channelise these energies towards a better and brighter future for all. It is a vision document that aims to create and exploit synergies between all forms of intellectual property (IP), concerned statutes and agencies. It sets in place an institutional mechanism for implementation, monitoring and review. It aims to incorporate and adapt global best practices to the Indian scenario. This policy shall weave in the strengths of the government, research and development organisations, educational

institutions, corporate entities including MSMEs, startups and other stakeholders in creation of an innovation-conducive environment, which stimulates creativity and innovation across sectors, as also facilitates a stable, transparent and service-oriented IPR administration in the country. The Policy recognises that India has a well-established TRIPS-compliant legislative, administrative and judicial framework to safeguard IPRs, which meets its international obligations while utilising the flexibilities provided in the international regime to address its developmental concerns. It reiterates India's commitment to the Doha Development Agenda and the TRIPS agreement. The Policy lays down the following objectives: (i) IPR Awareness: outreach and promotion - to create public awareness about the economic, social and cultural benefits of IPRs among all sections of society; (ii) generation of IPRs - to stimulate the generation of IPRs; (iii) legal and legislative framework - to have strong and effective IPR laws, which balance the interests of rights owners with larger public interest; (iv) administration and management -to modernise and strengthen service oriented IPR administration; (v) commercialisation of IPRs - get value for IPRs through commercialisation; (vi) enforcement and adjudication - to strengthen the enforcement and adjudicatory mechanisms for combating IPR infringements; and (vii) human capital development - to strengthen and expand human resources, institutions and capacities for teaching, training, research and skill building in IPRs.

Productivity and Quality

DPIIT is the nodal department for the promotion of productivity and quality in the industrial sector. The National Productivity Council (NPC) represents India in the Tokyo based Asian Productivity Organisation (APO), of which India is a founder member. NPC undertakes productivity augmentation through domain specific consultancy; training; workshops; seminars and conferences to government; public and private sectors; productivity related research; monitoring and evaluation of various government schemes; and projects and information dissemination through collaboration with APO.

The Quality Council of India, another autonomous body under this Department, promotes adoption of quality standards relating to Quality Management Systems (ISO 9001 Series), Environment Management

Systems (ISO 14001 Series), Food Safety Management Systems (ISO 22000 Series), Product certification and inspection bodies through the accreditation services provided by National Accreditation Board for Certification Bodies (NABCB). Besides NABCB, there are four other boards, viz., National Accreditation Board for Education and Training (NABET); National Accreditation Board for Hospitals and Healthcare Providers (NABH); National Accreditation Board for Testing and Calibration Laboratories (NABL); and National Board for Quality Promotion (NBQP) which provide accreditation certification on education, health and quality promotion respectively.

Industrial/Economic Corridors

Development of industrial/economic corridors is a very important policy initiative for boosting industrial development, income and employment.

Delhi-Mumbai Industrial Corridor

The Delhi-Mumbai Industrial Corridor (DMIC) project was launched in pursuance of an MoU signed between the Government of India and the Government of Japan in 2006. The DMIC is being developed on either side, along the alignment of the 1,504 km long Western Dedicated Rail Freight Corridor between Dadri (UP) and Jawaharlal Nehru Port Trust (JNPT), Navi Mumbai.

Chennai-Bengaluru Industrial Corridor

The Chennai-Bengaluru Industrial Corridor (CBIC) proposes to address the infrastructure bottlenecks through a holistic approach while benefitting from the inherent strengths and competitiveness of each of the CBIC states.

Bengaluru-Mumbai Economic Corridor

The Bengaluru-Mumbai Economic Corridor (BMEC) is intended to facilitate development of a well-planned and resource-efficient industrial base served by world-class sustainable connectivity infrastructure, bringing significant benefits in terms of innovation, manufacturing, job creation and resource security to the two states.

Amritsar-Kolkata Industrial Corridor

In order to give a boost to industrial development in the densely populated states of northern and eastern India, the government is to commence work on creating an Amritsar-Kolkata Industrial Corridor (AKIC). This will be structured around the Eastern Dedicated Freight Corridor (EDFC) as the backbone and also the highway system that exists in this route.

Vizag-Chennai Industrial Corridor

The Visakhapatnam-Chennai Industrial Corridor (VCIC) is a key part of the East Coast Economic Corridor (ECEC), India's first coastal corridor. VCIC is aligned with the Golden Quadrilateral and is poised to play a critical role in driving India's Act East Policy.

National Industrial Corridor Development and Implementation Trust

In view of the success and importance of DMIC project, four more industrial corridors were approved, namely, Amritsar-Kolkata Industrial Corridor (AKIC) Bengaluru-Mumbai Economic Corridor (BMEC), Chennai-Bengaluru Industrial Corridor (CBIC) and East Coast Economic corridor with Vizag-Chennai Industrial Corridor (VCIC) as the initial phase of development. It has been expanded and re-designated as National Industrial Corridor Development and Implementation Trust (NICDIT).

Foreign Direct Investment Policy

The Department for Promotion of Industry and Internal Trade is the nodal department for formulation of policy on Foreign Direct Investment (FDI). It is also responsible for maintenance and management of data on inward FDI into India, based upon the remittances reported by the Reserve Bank of India. With a view to attracting higher levels of FDI, government has put in place a liberal policy on FDI, under which FDI up to 100 per cent is permitted, under the automatic route in most sectors/activities. Significant changes have been made in the FDI policy regime in recent times, to ensure that India remains an increasingly attractive investment destination. The Department plays an active role in the liberalisation and rationalisation of the FDI Policy. Towards this end, it has been constructively engaged in extensive stakeholder consultations on various aspects of the FDI Policy.

Further, after abolition of the erstwhile Foreign Investment Promotion Board (FIPB), process for granting FDI approvals has been simplified wherein the work relating to processing of applications for FDI and approval from the government thereon under the extant FDI Policy and FEMA, are now handled by the concerned ministries/departments. However, DPIIT is a single point interface of the government to facilitate investors for Foreign Direct Investment through approval route. In this regard, a new portal (http:// www.fifp.gov.in) has been created, which is administered by this Department and the portal will continue to facilitate the single window clearance of applications which are through approval route. DPIIT is the nodal department for approvals in case of multi brand retail, trading, food, product retail, trading, and non-resident Indian/export oriented units investments. Cases pertaining to issue of shares against capital goods/machinery/ pre-operative and pre-incorporation expenses are also processed by DPIIT.

National Design Policy

The National Design Policy was approved in 2007. The details of the Policy, inter alia, include: (i) promotion of Indian design through a well-defined and managed regulatory, promotional and institutional framework; (ii) setting up of specialised Design Centres or Innovation Hubs for sectors such as automobile and transportation, jewellery, leather, soft goods, digital products, toys and games, which will provide common facilities and enabling tools like rapid product development, high performance visualisation, etc., along with enterprise incubation as well as financial support through mechanisms like venture funding, loans and market development assistance for startup design-led ventures and young designers' design firms/houses; (iii) formulation of a scheme for setting up Design Centres/ Innovation Hubs in select locations/industrial clusters/backward states, particularly in the North East; (iv) laying special focus on upgradation of existing design institutes and faculty resources to international standards, particularly the National Institute of Design (NID) and its new campuses/centres, with a view of spreading quality education in design to all regions of the country, four more National Institutes of Design on the pattern of NID to be set up in different regions of the country during the Eleventh Five Year Plan; (v) encouraging the establishment of departments of design in all the Indian Institutes of Technology (IITs) and all the National Institutes of

Technology (NITs) as well as in prestigious private sector Colleges of Engineering and Architecture; (vi) facilitating the establishment of a Chartered Society for Designers (on the lines of the Institutions of Engineers, the Institution of Architects, the Medical Council, the Bar Council, etc.), to govern the registration of Design Professionals and the various matters relating to standards setting in the profession; and (vii) setting up an India Design Council (IDC) with eminent personalities drawn from different walks of life, etc.

A Design Clinic Scheme project is being implemented by NID across the country which is intended to improve the manufacturing competency of the MSMEs through design intervention to their products and services and to provide them design edge in the global market and hence supports the Make in India programme.

Leather Industry

Leather industry plays an important role in the Indian economy in view of its substantial overall output, export earnings and employment potential. The export of leather and leather products from the country has undergone a structural change in the last two decades, share of leather footwear, leather garments, leather goods, and several articles of leather in the total exports has increased substantially as a result of government's policy to encourage export of value added leather products.

Indian Leather Development Programme

Indian Leather Development Programme (ILDP) aims at augmenting raw material base through modernisation and technology upgradation of leather units, addressing environmental concerns, human resource development, supporting traditional leather artisans, addressing infrastructure constraints and establishing institutional facilities.

Industrial Performance

The Index of Industrial Production (IIP), measuring industrial performance monitors production in manufacturing, mining and electricity sectors and also in use-based groups such as primary goods, capital, intermediate, infrastructure/ construction goods, consumer durables and consumer non-durables. IIP registered a growth rate of 3.8

per cent on account of growth in electricity generation (5.2 per cent), manufacturing (3.9 per cent) and mining (2.9 per cent) in 2018-19. As per the use-based classification, primary goods, capital goods, intermediate, infrastructure/construction goods, consumer durables and consumer non-durables registered growth of 3.5 per cent, 2.7 per cent, 0.9 per cent, 7.3 per cent, 5.5 per cent and 4.0 per cent respectively during the same period. IIP registered cumulative growth of 0.5 per cent during the period April to October 2019-20, over corresponding period of previous year. The Index of Manufacturing, Mining and Electricity sector, grew by 0.5 per cent, (-) 0.4 per cent and 1.6 per cent respectively during April to October, 2019-20, over corresponding period of previous year. As per the use-based classification, for the period April to October, 2019-20, primary goods, intermediate goods, and consumer non-durables registered positive growth of 0.2 per cent, 11.3 per cent and 4.3 per cent respectively, whereas, the index of capital goods, infrastructure/construction goods, consumer durables registered negative growth of (-) 12.0 per cent, (-) 2.4 per cent and (-) 7.0 per cent respectively.

Performance of Eight Core Industries

The Index of Eight Core Industries (ICI) monitors production of eight core industries, i.e., coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity every month. In line with the base year change in IIP, the Office of the Economic Adviser, Department of Industrial Policy and Promotion, revised the base year of Index of Eight Core Industries to 2011-12. These eight industries have combined weight of around 40.27 per cent in Index of Industrial Production (IIP).

Cement Industry: Cement is one of the most technologically advanced industries in the country. The industry plays a crucial role in the development of housing and infrastructure sector of the economy. Price and distribution control of cement has been removed since 1989 and cement industry was de-licensed in 1991 under Industrial (Development & Regulation) Act, 1951. Since then, this industry has progressed well both in capacity/production and in process technology. India is producing different varieties of cement like Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Blast Furnace Slag Cement (PBFS), Oil Well Cement, White Cement, etc. These different varieties of

cement are produced as per Bureau of Indian Standards (BIS) specifications and its quality is comparable with the best in the world. Cement cannot be sold in the country without BIS mark. Indian cement industry has managed to keep pace with global technological advancement. Induction of advanced technology has helped industry immensely to improve its efficiency by conserving energy, fuel and addressing environmental concerns. India is the second largest manufacturer of cement after China in the world.

Ceramic Industry: The ceramic industry is about 50 years old. It comprises ceramic tiles, sanitary-ware and crockery. Ceramic products are manufactured both in the large and small-scale sectors with wide variation in type, size, quality and standard by the national and regional players. India continues to rank No. 3 in terms of production and consumption of tiles in the world after China and Brazil. The industry gives direct and indirect employment to over 2 lakh people. With the majority of raw materials necessary for the production of tiles available in the country, the Indian tile industry has kept pace with the times embracing modern technology in designing and manufacturing and is capable of producing world-class tiles.

Tyre & Tubes Industry: Tyres play an integral role to ensure mobility including movement of passengers and essential goods across the urban and rural landscape of the country using all types of vehicles ranging from carts, tractors, trucks and buses to the latest generation passenger cars that ply on the modern expressways. All types of tyres required to meet the domestic demand are manufactured in India. These tyres include moped tyres weighing 1.5 kg to off-the-road tyres for earthmovers which weigh 1.5 tonnes, bias ply tyres to rugged all steel radial truck tyres to high performance passenger car radial and tubeless tyres etc. India is one of the few countries worldwide which has attained self-sufficiency in manufacturing a wide range of tyres for all applications. With the objective of ensuring the safety of human lives and vehicles and also availability of quality products, a Quality (Control) Order for Pneumatic Tyres and Tubes for Automotive Vehicles was notified by the Department in 2009. This prohibits import, sale or distribution of pneumatic tyres and tubes which do not conform to the specified Bureau of Indian Standards and which do not bear the standard mark. Indian Tyre industry consists of 39 companies with 60 tyre

manufacturing plants. The large tyre companies are namely, MRF Ltd., Apollo Tyres, JK Tyres, CEAT, Goodyear, Modi Rubber, etc. Three Indian companies (MRF Ltd., Apollo Tyres and JK Tyres) are in the list of top 25 Global Tyre companies.

Rubber Goods Industry: The rubber goods industry excluding tyre and tubes consists of 4,550 small and tiny units generating about 5.50 lakhs direct jobs. The rubber industry manufactures a wide range of products like rubber cots and aprons, contraceptives, footwear, rubber hoses, cables, camelback, battery boxes, latex products, conveyor belts, surgical gloves, balloons, rubber moulded goods, etc. The main raw materials used by the rubber goods manufacturing industry are natural rubber, various types of synthetic rubber, carbon black, rubber chemicals, etc.

Cigarette Industry: The cigarette industry is an agro-based labour intensive industry. Cigarette included in the First Schedule to the Industries (Development & Regulations) Act, 1951, requires industrial license.

Paints & Allied Products: The Paints and Allied Industry which has been exempted from compulsory licensing, mainly consists of paints, enamels, varnishes, pigments, printing inks, etc. These play a vital role in the economy by way of protecting national assets from corrosion. These items are manufactured both in the organised and small-scale sector.

Glass Industry: Glass industry comes under the category of delicensed. It covers seven items such as flat glass (including sheet, float, figured, wired, safety, mirror glass), glass fibre and glass wool, hollow glassware, laboratory glassware, table and kitchen glassware, glass bangles and other glassware. There has been growing acceptability of the Indian flat glass products in the global market. The Indian manufacturers had explored new markets. There is considerable scope in demand for glass fibre products particularly due to growth in petrochemical sector and allied products.

Paper Industry: India rules as one of the fastest growing paper markets in the world. The growing knowledge base coupled with synergistic contributions from flagship schemes, namely, Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Inclusive Education for the Disabled at Secondary School (IEDSS), adult education, Right to Education and central government scholarship and

education loan scheme, assured a robust demand for paper and paper board. The industry was de-licenced in July 1997. As per the the present policy, FDI up to 100 per cent is allowed on the automatic route for the pulp and paper sector. There are around 850 units which manufacture pulp, paper, paper board and newsprint with an installed capacity of nearly 25 million tonnes out of which 3.5 million tonnes are lying idle. The per capita consumption of paper in India is about 13 kg, which is much lower than world average (58 kg). The Indian paper industry is in a fragmented structure, consisting of small, medium and large paper mills having capacity ranging from 5 to 1,500 tonnes per day. These units use wood and agro residues as well as recovered paper as raw material.

Paper & Paperboard Segment: Indigenous Paper and Paperboard segment produces all the main varieties of paper that are in demand in the market, viz., writing and printing (38 per cent), packaging grade paper (53 per cent), newsprint (8 per cent) and speciality paper. However, certain speciality paper such as coated paper, security papers and cheque paper, etc., are being imported in the country.

Newsprint: The Newsprint sector in the country is governed by the Newsprint Control Order (NCO), 2004. The mills listed under the schedule of this order are exempt from excise duty, subject to actual user condition. At present, there are 124 mills registered under the Schedule to the NCO. However, only 35 are producing newsprint making the operating installed capacity 0.99 million tonnes per annum. About 23 mills have closed operations since being listed in the NCO and 89 mills have discontinued the production of newsprint. Nearly half of the newsprint demand in the country is met by imports.

Salt Industry: India continues to hold third position in the production of salt in the world after China and USA with annual production of 260 lakh tonnes and is the second largest producer of iodised salt, next to China. From an era of shortfall and import at the time of independence, the country has made spectacular progress due to pragmatic policies in short time, sufficiency was achieved (1953) and made a dent in the export market. Since then the country has never looked back.

Explosives: There are 74 factories, in the medium and small-scale sector, engaged in the production of explosives. Site Mixed Explosives

(SME) has a consolidated licensed capacity of 16,56,555.5 MT of explosives production.

Light Electrical Industry Sector: The light electrical industry is a diverse sector having a number of distinct products and sub-products. It includes goods like electrical wires and cables, transmission tower, cranes, lifts and escalators, refrigerators, washing machine, air conditioners, storage batteries, dry cell batteries, electrical lamps and tubes etc.

Electrical Wires and Cables: Electrical Wires and Cables industry is one of the earliest industries established in the country. A wide range of wires and cables are manufactured in the country which includes communication cables such as jelly filled telephone cables, optic fibre cables, local area network cables, switchboard cables, co-axial cables, VSAT cables, electrical cables such as electrical wires, winding wires, automotive/battery cables, UPS cables, flexible wires, low voltage power cables and EHT power cables.

Transmission Towers: Transmission Towers support high voltage transmission lines which carry electricity over long distance. These lines typically feed into sub-station so that the electrical voltage can be reduced to a level that can subsequently be used by the customers. There is an increasing trend in India to have larger power stations, particularly mega and ultra-mega power projects. Consequently, while there would be fewer but larger power generating stations, the demand for transmission of energy would grow substantially.

Cranes: Cranes and hoists are an important category of material handling equipment required by almost all sectors across the industry. Wide range of cranes are manufactured in the country and these include Electric Overhead Travelling (EOT) cranes, mobile cranes, ladle cranes, hydraulic decks, crab cranes, floating cranes, controller cranes, etc. There is a good potential for growth of this sector in view of increased industrial activities in various fields as well as construction industry.

Lifts and Escalators: The use of lifts and escalators is increasing rapidly due to substantial investments in construction of multi-storeyed housing complexes, large malls and supermarkets of international standards, modernisation of airports and railway stations apart from industrial sectors. A wide range of lifts and escalators are manufactured

in India. These include single speed, double speed, gearless, hydraulic, servo and Variable Voltage Variable Frequency (VVVF) elevators.

Refrigerators: In India, refrigerators have the highest aspiration value of all consumer durables with the exception of television. The refrigerator industry has become highly competitive. A number of brands have entered the market and the consumers have wider choices. There are two basic designs adopted in refrigerators presently being manufactured in the country. These are commonly referred to as Direct Cool (DC) and Frost Free (FF). There has been gradual consumer preference shift towards frost free segment. Increasing number of dual income households are shifting the demand from the conventional 180L refrigerators to the larger 220L and higher capacity refrigerators with double doors.

Washing Machines: The washing machine market in the country can be divided into semi-automatic and fully-automatic. With rising incomes and higher aspirations, there is a gradual shift towards higher capacity and fully-automatic washing machines. Controls are changing from purely mechanical to fully electronic as micro-controllers are incorporated into the designs. While providing intelligence, micro-controllers boost reliability, drive down costs and improve energy efficiency.

Air Conditioners: Air Conditioners (ACs) are gradually being treated as a necessity in changed socio-economic environment with changing lifestyle. The air-conditioners' market can be classified into three segments: window AC, split AC and central AC. The split ACs are gaining popularity due to limitation of space and increase in number of people living in flats in multi-storeyed complexes and also because of less noise. Bureau of Energy Efficiency (BEE), a statutory body under the Ministry of Power has introduced energy efficiency based star rating for air conditioners to help consumers buy the best energy efficient products.

Lead Acid Storage Batteries: Lead acid batteries are accumulators of current and power which is discharged over a period of time. They are used in vehicles and also for various industrial uses such as for backup power for UPS application, control rooms, power stations, telecommunications, etc. In addition, it is also used for emergency lights for houses, telephone systems and as power source for mining, etc. A new

application of lead acid batteries has emerged today in electric vehicles. The average life of the battery is approximately 2 years, hence these batteries will be needed as replacement throughout the life of the vehicle or the machinery in use. Although there are few large-scale manufacturers of the product in India, there are large numbers of very small-scale units manufacturing the product in the most unorganised manner. The product manufactured by them normally does not meet the required standards as specified by BIS. In order to ensure safe disposal of lead acid batteries, Ministry of Environment and Forests (now Ministry of Environment, Forest and Climate Change) has issued a notification Batteries (Management and Handling) Rules, 2001 under Environment (Protection) Act, 1986.

Dry Cell Batteries: Dry Cell Batteries are one of the most commonly used items. These are the oldest type of batteries which are still being used. Performance of dry cell batteries has undergone progressive improvements through technological developments. New types of dry cell batteries with longer shelf life and greater dependability and also rechargeable cells have come up. Nickel cadmium batteries and other rechargeable batteries are manufactured in the country to meet the requirement of defence, telecommunications and electronics. The growing popularity of cellular phones, laptops and imported toys could open the market for a new range of batteries that are not produced at present.

Electrical Lamps and Tubes: Wide range of lamps and tubes are being manufactured in the country which include general lighting service lamps such as incandescent bulbs, halogen lamps, gas discharge lamps such as fluorescent tube light, compact fluorescent lamp, high pressure mercury vapour lamps, metal halide lamps, low pressure and high pressure sodium vapour lamps and variety of special lamps. The higher energy cost has led to the development of energy efficient lamps consuming less power and giving output as close to daylight. Compact Fluorescent Lamps (CFL) which consume about 20 per cent of the electricity for the same light output and last up to 8 times longer than the GLS are getting more popular. LEDs have a great potential to provide highly efficient lighting with little environmental pollution in comparison to the incandescent lamps (ICLs) and fluorescent lamps (FTLs, CFLs). Penetration of LEDs in India could significantly reduce lighting load as

almost 22-25 per cent of electricity is consumed for lighting, which is also a major contributing factor of peak demand. Due to higher costs, LEDs are not very popular even though its production has started in the country.

Light Engineering Industry Sector: The Light Engineering Industry is a diverse industry with the number of distinct sectors. This industry includes mother of all industries like castings and forgings to the highly sophisticated micro-processor based process control equipment and diagnostic medical instruments. This group also includes industries like bearings, steel pipes and tubes, fasteners, etc. The products covered under the engineering industry are largely used as input to the capital goods industry. Hence the demand of this sector in general depends on the demand of the capital goods industry.

Roller Bearing Industry: Roller bearings are essential components in the rotating parts of virtually all machines such as automobiles, electric motors, diesel engines, industrial machinery and machine tools, etc. Bearings are used in diversified fields. Hence, the product range is vast and diversified. The indigenous manufacturers are manufacturing bearings of quality and precision at par with world renowned manufacturers in the diversified range of general purpose where the demand is large to justify indigenous production on economic consideration. Bearings, generally used for special applications that require high technology, are still being imported. There is a considerable scope for development of bearings of smaller size and lighter weight with improved performance in harsh operating conditions like high or low temperature.

Ferrous Castings: Ferrous castings are pivotal to the growth and development of engineering industries since these constitute essential intermediates for automobiles, industrial machinery, power plants, chemical and fertiliser plants. Indian foundry industry is the third largest in the world. This industry is now well established in the country and is spread across a wide spectrum consisting of large, medium, small and tiny sector. The salient feature of the foundry industry is its geographical clustering. Typically, each foundry cluster is known for catering to some specific end use markets. For example, the Coimbatore cluster is famous for pump sets castings, the Kolhapur and Belgaum for automotive

castings, Rajkot cluster for diesel engine castings and Batala and Jalandhar for machinery parts and agricultural implements.

Process Control Instrument Industry: Process control instruments cover wide range of instruments and systems required for monitoring and measurement of physical, chemical and biological properties. They are used for measurement and control of process variables like pressure, temperature, humidity, liquid level, flow, specific gravity, chemical composition including pH and many forms of spectrometry and spectrophotometry. The process control instruments have become an integral part of the modern industrial activity. This industry is a key industry which provides tools for automation. Their importance is significant in high-cost, large and sophisticated process industries like fertiliser, steel, power plant, refineries, petrochemicals, cement and other process industries. The present technology is a microprocessor based centralised control system.

Seamless Steel Pipes and Tubes: Seamless steel pipes and tubes are produced in different sizes. The wide size range makes them suitable for use in number of versatile area of application. The process of manufacture imparts strength and durability to the pipes and thus can be used for corrosion-resisting applications. These pipes are also used for aircraft, missile and anti-friction bearing, ordnance, etc. Ultra-high strength and corrosion-resistant properties make these perfect for oil and gas industry, chemical industry and automobile industry. Oil sector accounts for around 60 per cent of the total requirement of seamless pipes. Bearings and boiler sector contribute around 30 per cent of demand. The industry is able to manufacture tubes up to 14” outer diameter.

Electrical Resistance Welded (ERW) Steel Pipes and Tubes: Based on the customers’ requirement, ERW steel pipes and tubes are available in various qualities, wall thickness and diameters of the finished pipes. High performance ERW steel pipes and tubes possess high corrosion resistance, high deformability, high strength and high toughness. These pipes are used in fencing, lining pipes, oil country tubulars, scaffolding, water and gas conveyance, etc. There has been tremendous increase in the production of ERW steel pipes due to higher demand in oil and gas

industry, infrastructure and automobile uses. There are a large number of units in the MSME sector.

Submerged-Arc Welded (SAW) Pipes: There are two types of SAW pipes namely longitudinal and helical welded SAW pipes. Longitudinal SAW pipes are preferred where thickness of pipe is more than 25mm and in high pressure gas pipeline. Helical welded SAW pipes are used for low pressure applications. The cost of helical SAW pipes is less than longitudinal pipes. There is a huge demand of SAW pipes in the country due to transportation of oil and gas and transmission of water.

Industrial Fasteners: The fastener industry in India may be classified into two segments: high tensile and mild steel fasteners. These broadly include nuts, bolts, studs, rivets and screws. Mild steel fasteners are primarily manufactured by the unorganised sector while high tensile fasteners requiring superior technology are dominated by companies in the organised sector. The automobile industry accounts for bulk of the total demand of this industry. Consumer durables and railways are the other primary users of the high tensile fasteners. Automobile sector is likely to drive growth in the fastener industry.

Steel Forgings: Forgings are intermediate products used widely by original equipment manufacturers in the production of durable goods. The composition of the Indian forging industry can be categorised into four sectors - large, medium, small and tiny. A major portion of this industry is made up of small and medium units/enterprises (SMEs). The industry was previously labour-intensive but with increasing globalisation it is becoming more capital-intensive. Among the industries that depend on forgings are automotive; agricultural machinery and equipment; valves, fittings, and petrochemical applications; hand tools and hardware; off-highway and railroad equipment; general industrial equipment; ordnance, marine and aerospace. The key driver of demand of forging is the automobile industry. About 65 per cent of the total forging production is used in this sector.

Bicycle Industry: The bicycle industry of India is one of the most established industries. India is the second largest bicycle producer of the world, next only to China. Most of the manufacturing units are located in Punjab and Tamil Nadu with Ludhiana (Punjab) being a major bicycle production hub. The industry is making an endeavour for enhancing

export since there is a significant scope for export of bicycles, bicycle spare parts and bicycle accessories. Bicycle companies are now focusing on urban markets and are looking to expand their base in the professional and adventure categories.

Food Processing Machinery: The Indian market for food processing machinery has been growing steadily fuelled by strong domestic demand for processed food and beverage products spurred by increase in income level, increasing number of women joining the workforce, rapid urbanisation, changing lifestyle and mass media promotion. The most promising areas of growth are fruit and vegetable processing, meat, poultry, dairy and seafood, packaged/convenience food, soft drinks and grain processing. Food processing sector is expected to grow at a healthy pace considering the rapid changes in food habits and consumerist culture developing in the country. The machinery manufacturers have honed their expertise in manufacturing dairy machinery and other core equipment of food processing machinery.

Packaging Machinery Industry: Packaging of consumer products or industrial products is emerging as the USP in the marketing strategies. Developments in packaging technology have not only contributed to improving the aesthetic appeal of the products but also the shelf life. In some cases, specialised packaging becomes a technical necessity. Considering the growth prospects in the industrial sector and growing consumer awareness of packaging, it is expected that there would be substantial growth in this area. There is a wide range of packaging machinery available in the country covering packaging of vast range of items. Some of the commonly available packing machinery includes machines for coding and online printing machines; feeding and labelling machines; strip packaging; form fill and seal machines; carton filling; fully automatic bag making machinery; and automatic microprocessor controlled packaging machines.

Water Pollution Control Equipment: Due to growing awareness regarding water pollution and stringent environmental control standards being enforced for various uses including process industries, the water/waste water treatment industry is poised for huge growth. The various categories of water pollution control equipment broadly include wastewater treatment plants, drinking water treatment plants and effluent

treatment plants. Water/wastewater treatment is the process of removing contaminants and it includes physical, chemical and biological processes to remove physical, chemical and biological contaminants. The primary treatment is the first step in the treatment process and involves the removal of pollutants that settles or floats. The common industrial equipments are clarifiers and oil-water separator devices. The secondary treatment is designed to substantially degrade the biological content of the sewage. The common equipments are activated sludge, filters, biological reactors etc. The tertiary treatment is a polishing step to remove contaminants that missed in the primary and secondary treatment and removal of suspended solids, refractory organics and toxic components. Tertiary physical processes are filtration and carbon absorption. Chemical process includes precipitation, oxidation and neutralisation. The biological processes involve biodegrading. Organisms such as bacteria, fungi, yeasts and algae are commonly used to break down the organic matter. The cell tissues are then removed from the treated water by physical method.

Air Pollution Control Equipment: Industrialisation and urbanisation have resulted in a profound deterioration of India's air quality. India's most severe environmental problem, come in several forms, including vehicular emissions and untreated industrial smoke. Air pollution, especially in metropolitan cities and large towns, has assumed great significance with the adoption of stringent environmental control standards for various industries. Hence, the pollution control equipment industry has acquired importance. Further judicial pronouncements have given a definite direction and urgency for adoption of air pollution control measures. The choice of control method depends on factors such as the nature of pollutant, flow-rate (amount of pollutant emitted), particle size and desired collection efficiency. The air pollution control equipments are broadly classified under the categories such as settling chambers, cyclone and multi-cyclones, bag filters, wet scrubbers, spray tower, venturi scrubber, ionizing scrubber and electrostatic precipitator.

Industrial Gears: Industrial Gears comprises mainly gears and gear boxes. Gears are used for two basic purposes: increase or decrease of rotation speed and increase or decrease of power or torque. Gears being an important part of a machine have immense usage within various industries. These industries include automotive industries, coal plants

industry, steel plants industry, paper industry, in mining and many more. In these industries, they behold a wide area of application. They are used in conveyors, elevators, kilns, separators, cranes and lubrication systems. Gearbox is defined as a metal casing in which a train of gears is sealed. The manufacture of gears and gear boxes involve high precision machining and accurate assembly as mechanical power is to be transmitted noiselessly and with minimum losses. Different types and sizes of gears such as spur gears, helical gears, worm gears, spiral gears and many other kinds are manufactured in the country. The demand for gears and gear boxes predominantly depend on the growth of industrial machinery, machine tools, and consumer and automobile sector. Considering the industrial growth prospects, particularly in automobile sector, the demand for gears and gear boxes is expected to grow at a healthy pace.

Wood-based Industry: Plywood, veneers of all kinds and other wood-based products such as particle board, medium density fibre board, etc., form the major segment of this industry in India. The industry comes under the de-licenced category.

Watch Industry: The watch industry in the country comprises units both in the organised as well as the small-scale sector. The organised sector contributes 40 per cent of the total demand while the rest is met by the unorganised sector. Most of the watches are being manufactured under the electronic system.

Central Public Sector Enterprises

The Ministry of Heavy Industries and Public Enterprises, comprising the Department of Heavy Industry and the Department of Public Enterprises, functions under the charge of Cabinet Minister (Heavy Industries and Public Enterprises). There is a Minister of State for Heavy Industries and Public Enterprises. The Ministry promotes the development and growth of three sectors, i.e., capital goods, auto and heavy electrical equipment in the country; administers 31 Central Public Sector Enterprises (CPSEs); 5 Autonomous Organisations and frames policy guidelines for Central Public Sector Enterprises (CPSEs) and overall administration of CPSEs. In fulfilling its role, the Department coordinates with other ministries, CPSEs and concerned organisations.

Some of the important tasks of the Department are listed as follows: coordination of matters of general policy affecting all public sector enterprises; evaluation and monitoring the performance of public sector enterprises, including the Memorandum of Understanding mechanism; matters relating to Permanent Machinery of Arbitration for such enterprises; counselling, training and rehabilitation of employees in CPSUs, rendering advice relating to revival, restructuring or closure of public sector enterprises including the mechanisms; and categorisation of central public sector enterprises including conferring 'Ratna' status.

Websites: www.dhi.nic.in

www.dpe.gov.in

Micro, Small and Medium Enterprises

The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialisation of rural and backward areas, thereby reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country. Ministry of Micro, Small & Medium Enterprises envisions a vibrant sector by promoting growth and development of the sector, including Khadi, Village and Coir Industries, in cooperation with concerned ministries/departments, state governments and other stakeholders, through providing support to existing enterprises and encouraging creation of new enterprises.

The Micro, Small and Medium Enterprises Development (MSMED) Act was notified in 2006 to address policy issues affecting MSMEs as well as the coverage and investment ceiling of the sector. The Act provides the first-ever legal framework for recognition of the concept of "enterprise" which comprises both manufacturing and service entities. It defines medium enterprises for the first time and seeks to integrate the three tiers of these enterprises, namely, micro, small and medium. The Act also provides for a statutory consultative mechanism at the national

level with balanced representation of all sections of stakeholders, particularly the three classes of enterprises; and with a wide range of advisory function.

In 2007, subsequent to an amendment of the Government of India (Allocation of Business) Rules, 1961, erstwhile Ministry of Small Scale Industries and the Ministry of Agro and Rural Industries were merged to form the Ministry of Micro, Small and Medium Enterprises. This Ministry now designs policies and promotes/ facilitates programmes, projects and schemes and monitors their implementation with a view to assisting MSMEs and help them to scale up. The primary responsibility of promotion and development of MSMEs is of the state governments. However, the Government of India supplements the efforts of the states through various initiatives. The role of the Ministry and its organisations is to assist the states in their efforts to encourage entrepreneurship, employment and livelihood opportunities and enhance the competitiveness of MSMEs in the changed economic scenario.

Website : www.msme.gov.in

Number of MSMEs

As per the National Sample Survey (NSS) 73rd round, conducted by National Sample Survey Office, in 2015-16, there were 633.88 lakh unincorporated non-agriculture MSMEs in the country engaged in different economic activities excluding the MSMEs registered under (a) Sections 2 m (i) and 2m (ii) of the Factories Act, 1948; (b) Companies Act, 1956; and (c) Construction activities falling under Section F of National Industrial Classification (NIC) 2008.

Khadi and Village Industries Commission

Khadi and Village Industries Commission (KVIC) established under the Act of Parliament (No. 61 of 1956), and as amended in 1987 and 2006 is a statutory organisation under the Ministry of MSME and engaged in promoting and developing Khadi and Village Industries (KVI) for providing employment opportunities in the rural areas, thereby strengthening the rural economy. KVIC has been identified as one of the major organisations in the decentralised sector for generating sustainable non-farm employment opportunities in rural areas at a low per capita investment. KVIC undertakes activities like skill improvement; transfer

of technology; research and development; marketing, etc., and helps in generating employment/self-employment opportunities in rural areas.

Website: www.kvic.gov.in

Coir Board

The Coir Board is a statutory body established under the Coir Industry Act, 1953, for promoting overall development of the coir industry and improvement of the living conditions of the workers engaged in this traditional industry. The functions of the Board for the development of coir industry, inter-alia, include undertaking scientific, technological and economic research and development activities; collection of statistics relating to exports and internal consumption of coir and coir products; development of new products and designs; publicity for promotion of exports and internal sales; marketing of coir and coir products in India and abroad; preventing unfair competition among producers and exporters; assisting in the establishment of units for the manufacture of products; promoting cooperative organisations among producers of husk, coir fibre, coir yarn and manufacturers of coir products; ensuring remunerative returns to producers and manufacturers, etc.

Website: www.coirboard.gov.in

Textiles

The Indian textiles industry is one of the largest in the world with a large raw material base and manufacturing strength across the value chain. The uniqueness of the industry lies in its strength both in the hand-woven sector as well as in the capital-intensive mill sector. The mill sector, with 3,400 textile mills having installed capacity of more than 50 million spindles and 8,42,000 rotors is the second largest in the world. Traditional sectors like handloom, handicrafts and small scale power-loom units are the biggest source of employment for millions of people in rural and semi-urban areas. The textile industry has inherent linkgages with agriculture, culture and traditions of the country making for its versatile spread of products appropriate for both domestic and the export markets. The textile industry contributes to 7 per cent of industry output in value terms of 2 per cent of India's GDP and to 15 per cent of the country's export earnings. With over 45 million people employed

directly, this industry is one of the largest sources of employment generation in the country.

In keeping with goal of making India's development inclusive and participative, the government's central focus has been on increasing textile manufacturing by building the best-in-class manufacturing infrastructure, upgradation of technology fostering innovation, enhancing skills and traditional strengths in the textile sector.

Website: www.texmin.nic.in

India Handloom Brand: Indian handlooms have worldwide recognition through India Handloom Brand (IHB) which guarantees high-quality, authentic handloom items made with organic substances. It has partnered with 100 retail stores to sell the exclusive IHB items from their stores. About 25 retail stores across India have started operations. Twenty three garment manufacturers are working with the IHB producers for sourcing the fabrics from IHB registered weavers and have designed and launched a separate range of garments. Leading garment brands have been working with IHB in bringing out a separate range of garment line using handlooms: BIBA, Peter England, ONAYA have already launched a separate range of handloom garments. In order to provide direct marketing platform to handloom weavers/artisans, 21 leading e-commerce companies have been engaged for online marketing of handloom products.

Silk

Silk in the Indian sub-continent is a luxury item. In India, about 97 per cent of the raw mulberry silk is produced in the states of Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal and Jammu and Kashmir. Three other commercially important types of silk fall into the category of non-mulberry silks namely: eri; tasar; and muga.

The Central Silk Board, under the Ministry of Textiles is the apex body to undertake, assist, encourage scientific, technological and economic research aiming towards improving the quality and productivity of silk through implementation of a Central Sector Scheme 'silk Samagra'- an integrated scheme for development of silk industry. The state sericulture departments shoulder the responsibility of extension and marketing besides implementing developmental schemes. The

government has given special emphasis for consolidation and expansion of sericulture in all north-eastern states through implementation of special sericulture projects under the umbrella scheme, “North Eastern Region Textile Promotion Scheme (NERTPS)”. The broad objectives of the scheme are to develop and modernise the sector by providing better infrastructure support, boosting production and productivity, technology upgradation, product diversification and value addition.

Cotton

Cotton is one of the most important cash crops in India and the country accounts for around 25 per cent of the total global fibre production. In the raw material consumption basket of the Indian textile industry, the proportion of cotton is around 59 per cent. Cotton sustains the livelihood of an estimated 5.8 million cotton farmers and 40-50 million people engaged in related activities such as cotton processing and trade. India has the largest area under cotton in the world with around 105 lakh hectares under cotton cultivation which is around 35 per cent of the world area. To support the cotton industry, Government of India announces Minimum Support Price (MSP) for two basic staple groups, viz., medium staple and long staple cotton. Cotton Corporation of India (CCI), a Public Sector Undertaking under the Textile Ministry, is the principal agency of Government of India for undertaking MSP operations in the event of prevailing seed cotton (kapas) price touching the MSP level.

jute

India is the largest producer of jute in the world with an average production of about 80 lakh bales of raw jute annually. The Government of India provides support to the jute growers not only through MSP operation by the Jute Corporation of India but also through direct purchase of jute sacking valued at around ₹ 6,000 crore annually for packing foodgrains by invoking provisions under the Jute Packaging Material (Compulsory Use in Packing Commodities) Act, 1987. This is a major support not only to the jute farmers but also to jute milI workers. A software platform “Jute-SMART” (Jute Sacking Supply Management & Requisition Tool) was implemented for procurement of jute sacking

from 2016. Through this software, different state government agencies are procuring jute bags of around 27.0 to 30.0 lakh bales (68 per cent of the total production of jute goods) annually valued at about ₹ 7,000 crores. This platform is an excellent example of e-Governance where multiple stakeholders are on the same platform managing the complex transactions relating to procument of jute sacking in a transparent and fair manner for a number of state governments from a number of jute mills involving various intermediaries. Jute-ICARE has been launched for increasing the income of jute farmers by at least 50 per cent through promotion of certified seeds, better agronomic practices and use of microbial retting of the jute plant.

Wool

For the holistic growth of the wool sector, the Ministry formulated a new integrated programme, i.e., Integrated Wool Development Programme (IWDP). The programme is to be implemented through Central Wool Development Board in major wool producting states in the next three years. A programme for development of Pashmina sector in J&K was announced.

Technical Textiles

Technical textiles are the future of the textiles industry. High tenacity fibers are the lightest and toughest fabrics yet. They have a variety of applications in automobile, aerospace, architecture and building, occupational therapy, sport and apparel industries etc. Eleven Focus Incubation Centres (FICs) have been established on plug-and-play model, five in COEs and six in NTs (Delhi, Bombay, Kanpur and Kharagpur), in order to help the potential entrepreneurs to enter into technical textiles. About 44 demonstration centres in North-East (NE) region and 9 Demonstration Centers in rest of India have been set up for promoting usage of agro textiles. Textile Research Associations (TRAs) have developed carbon fibre based space communication system. Low cost modular toilets using jute fibres have been developed.

Impetus to the Powerloom Sector

The powerloom sector is predominantly an unorganised sector and has many micro and small units - with 24.86 lakh powerlooms producing 57 per cent of the total cloth in the country. With a view to enhance quality

and productivity of the powerloom, the government launched *in situ* upgradation of plain powerlooms as part of PowerTex India under which plain powerlooms are attached with process control equipment leading to higher productivity, better quality and more than 50 per cent additional value realisation.

New Initiatives

Weavers ' Mudra Scheme: Weavers' Mudra Scheme was launched to provide concessional credit to the handloom weavers. Margin Money Assistance to a maximum of ₹ 10,000 per weaver and credit guarantee for a period of 3 years is also provided.

e-*Dhaga App:* Government of India launched Enterprise Resource Planning (ERP) System and e-Dhaga mobile App in 2016 to bring efficiency in service delivery to the handloom weavers and help them to access information on 24x7 basis. The App is available in 10 languages- Hindi, English, Assamese, Odiya, Kannada, Tamil, Telugu, Malayalam, Urdu and Bangla.

BunkarMitra Helpline: To provide a single point of contact to handloom weavers for their professional queries "BunkarMitra" Helpline 18002089988 for handloom weavers was launched in 2017. This service is available from 10:00 AM to 06:00 PM on all 7 days in a week in seven languages: Hindi, English, Tamil, Telugu, Bengali, Kannada and Assamese.

MoU with Financial Corporations: MoU was signed with National Backward Classes Finance and Development Corporation (NBCFDC) and National Scheduled Castes Finance and Development Corporation (NSFDC) to implement schemes of Government of India for OBC and SC artisans and weavers in 14 identified clusters with necessary forward linkages for income sustainability and enhancement.

Educational facilities to the children of handloom weavers: Memorandums of Understanding were signed with Indira Gandhi National Open University (IGNOU) and National Institute of Open Schooling (NIOS) to provide customised educational services to the weavers for which Ministry provides 75 per cent of the fee in case of SC, ST, BPL and women weaver families.

Artisan Helpline No. 18002084800 was launched in 2017 in seven languages—Hindi, English, Kannada, Assamese, Bengali, Tamil and Telugu.

Man Made Fibre

Share of Man Made Fibre (MMF) in the world textiles fibre consumption has been increasing steadily over the years. The global consumption pattern is in favour of synthetics (polyester, rayon, acrylic) and blends. In contrast with the global consumption pattern, in India, the domestic market has been dominated by cotton with MMF having a smaller share. To enable the textile sector grow from its current market size, man-made fibre manufacturing base in India needs to grow. Polyester Staple Fibre (PSF) and Polyester Filament Yarn (PFY) are the raw materials for the MMF textile value chain and Purified Terephthalic Acid or PTA is a key ingredient in the manufacture of PSF. As PTA is produced by limited number of producers in the country, it is also imported by textile MMF manufacturers. Imports of PTA were subjected to Anti-Dumping Duty (ADD), which was increasing the cost of MMF fibre/filaments in the country thereby eroding the cost competitiveness of the MMF textile industry in global markets. In the Union Budget 2020-21, ADD on PTA was removed enabling MMF manufacturers to procure raw material at globally competitive prices and in turn provide man-made fibre/filament to downstream industry at competitive prices.

Steel

The Ministry of Steel is responsible for planning and development of iron and steel industry, development of essential inputs such as iron ore, limestone, dolomite manganese ore, chromites, ferro-alloys, sponge iron etc., and other related functions. Crude steel production has shown a sustained rise since 2013-14 along with capacity.

This industry has been a core pillar of industrial development in the country. India’s crude steel capacity has steadily risen to 142 MT at present and India has become the world’s second largest producer of steel (-111 MT crude steel production in 2018). A vibrant domestic steel industry is important for a developing economy as it is a critical input across major sectors such as construction, infrastructure, automotive, capital goods, defence, rail, etc. Steel has also been proven to be a driver

for prompt environmentally sustainable economic development due to its recyclable nature and faster associated completion times. The steel sector is also pivotal for a nation due to driving employment generation and economic growth. It has a multiplicative effect on the economy stemming from both direct and associated effects on the supply chain and consumption industries.

Website: www.steel.gov.in

Global Ranking of Indian Steel

The consistent growth in production has ensured that India remains a dominant player in the global steel industry. Out of a total global crude steel production of 1,029 MT (during January-July 2020, down by 5.1 per cent), India was the 2nd largest crude steel producer (51.89 MT) with a 5.1 per cent share in total world production and a 21.9 per cent decline in production over the same period of 2019. China produced 593.17 MT of crude steel during this period and remained the largest crude steel producer in the world, accounting for 78 per cent of Asian production and 54 per cent of world crude steel production.

National Steel Policy

The National Steel Policy (NSP) was launched in 2017 to ensure that the Indian steel sector is prepared to service the growing requirements of modern India and to promote a healthy sustainable growth for the sector. The NSP was defined with the vision to create a technologically advanced and globally competitive steel industry that promotes economic growth. The Policy outlined key objectives for the steel sector and laid down multiple initiatives for the industry. Key features of the NSP 2017 include establishing self-sufficiency in steel production by providing policy support and guidance to private manufacturers, MSME steel producers and CPSEs. It encourages capacity additions; development of globally competitive steel manufacturing capabilities as well as cost-efficient production by facilitating domestic availability of iron ore, coking coal and natural gas; as well as overseas asset acquisitions of raw material. To support the sector, it also promotes initiatives to enhance the domestic steel demand.

The Policy projects crude steel capacity of 300 million tonnes (MT), production of 255 MT and a robust finished steel per capita consumption of 160 kg by 2030-31, as against the current consumption of 74 kg. The

Policy also envisages 100 percent indigenous fulfilment of demand for high grade automotive steel, electrical steel, special steels and alloys for strategic applications along with an increase in domestic availability of washed coking coal so as to reduce dependence on coking coal from about 85 per cent to around 65 per cent by 2030-31.

Key Initiatives

The Ministry has initiated action on several initiatives to operationalise the actions enlisted in the National Steel Policy. In addition, an integrated steel hub is being set up in Eastern India that will act as a pilot location for several of these initiatives. The initiatives include:

Purvodaya

The Eastern states of India (Odisha, Jharkhand, West Bengal, Chhattisgarh, and Northern Andhra Pradesh) are home to 80 per cent of the Indian iron reserves. Additionally they have access to important logistic infrastructure such as ports, inland waterways and slurry pipelines. Therefore, for the envisaged expansion of Indian steel sector, the Eastern Hub will serve as the engine driving the growth of the steel sector. At the same time, this will help drive investments, employment and improve the standard of living for the people. Steel will thus be a major driver for the development of these regions.

Therefore, a flagship initiative - Purvodaya was envisaged for an integrated steel hub in the Eastern states. It will drive best in class capacity creation, augment value addition and boost competiveness through the setting up of Greenfield steel plants, clusters, capital goods and requisite logistics infrastructure. It will act as a pilot location tor strategic initiatives being undertaken by the Ministry of Steel and will involve close coordination between various ministries of the central government and the state government—a process which has already been kick-started.

Make in Steel

Steel consumption study across countries reveals a dynamic relationship between a given nation’s stage of economic development and its pattern of steel consumption. Steel consumption rises rapidly during infrastructure building phase, steadies during capacity building and

plateaus during expertise building phase. India is on the cusp of rapid development in its infrastructure building phase and given the proposed ₹ 100 lakh crore spend in infrastructure, India's steel demand has massive potential to grow. The Ministry is therefore undertaking several initiatives to enable increase in steel intensity across key sectors:

Ispati Irada to encourage steel usage: This is a collaborative branding campaign with the objective of promoting the benefits of steel usage in various facets of nation building and how it impacts the lives of citizens in the country.

Roads: As part of the drive to improve usage of concrete roads in the country, the Ministry is evaluating guideline modifications to make lifecycle cost analysis mandatory. Additionally, implementation of IRC (Indian Roads Congress) guidelines for implementation for crash barrier installation is being pursued.

Bridges: Steel offers multiple advantages on a lifecycle cost criteria for bridges and they offer a significant opportunity to drive up steel usage in the country. Pursuant to this, the Ministry is evaluating guideline modification to make lifecycle cost analysis mandatory. Additionally, the inclusion of steel bridge designs in MoRTH guidelines is also being pursued.

Commercial and residential construction:lo enable increase in steel usage across commercial and residential buildings, the Ministry is evaluating changes across General Financial Rules (GFR), building codes as well as scheduled rates.

Low Cost Mass Housing: To promote the usage of steel in low cost housing especially through pre-fab structures, the Ministry is pursuing BIS code changes in IS 801-Design changes for pre-fab steel designs.

Boost domestic manufacturing through the DMI&SP Policy: Ministry of Steel has amended the Domestically Manufactured Iron & Steel Products Procurement Policy (DMI&SP) in order to increase domestic sourcing of iron and steel products by government agencies. Through this policy, steel imports worth more than ₹ 15,000 cr have so far been avoided.

Steel Capacity

As demand increases, ensuring a self-sufficient steel ecosystem will necessitate further steel capacity addition and value addition in the

country. The Ministry has initiated work on two key initiatives to enable this:

Framework for establishing large Greenfield steel plants: In order to achieve the envisioned increase in steel capacity, it would be imperative to enable set up of Greenfield steel plants. In order to facilitate this, the Ministry is working with various stakeholders towards designing a guiding framework to create a more favourable environment for Greenfield investments in the sector through a reduction of project risk for investors.

Policy for setting up steel clusters: Smaller steel producers are a crucial part of the Indian steel ecosystem. They are an important component to create value-addition in the steel ecosystem. Within this context, the Ministry is working on a draft policy to promote growth of smaller steel producers through the formation of clusters.

Fertilisers

Department of Fertilisers comes under the ambit of Ministry of Chemicals and Fertilisers. The main objective of the Department is to ensure adequate and timely availability of fertilisers at affordable prices for maximising agricultural production in the country. The main functions of the Department include planning, promotion and development of the Fertilisers industry, planning and monitoring of production; import and distribution of fertilisers and management of financial assistance by way of subsidy/concession for indigenous and imported fertilisers.

The Department has one attached office under it, viz., Fertilisers Industry Coordination Committee (FICC). It also administers 9 Fertilizer Public Sector Undertakings (PSUs).

Agriculture which accounts for about one seventh of the GDP, provides sustenance to nearly two-third of our population, Besides, it provides crucial backward and forward linkages to the rest of economy. Successive five-year plans have laid emphasis on self-sufficiency and self-reliance in foodgrain production and concerted efforts in this direction have resulted in substantial increase in agriculture production and productivity. In meeting the domestic requirement of foodgrains and

also generating exportable surpluses, the significant role played by chemical fertilisers is well recognised.

Website: www.fert.nic.in

The Department of Fertilisers has taken various initiatives to augment growth of the sector. These initiatives aim at working in the direction of promoting the indigenous production of fertilisers, and making them available to the farmers in time.

New Urea Policy

The New Urea Policy-2015 was notified with the objectives of maximising indigenous urea production; promoting energy efficiency in urea production; and rationalising subsidy burden on the government. It is expected that the domestic urea sector would become globally competitive in terms of energy efficiency over a period of three years. On the basis of actual energy consumption and preset norms, the units have been divided into three groups and revised energy consumption norms have been fixed for next three financial years. It will drive urea units to select better technology and different measure to reduce energy consumption. The higher energy efficiency due to these measures will reduce subsidy bill.

Neem Coating of Urea

Neem coating of urea (NCU) has been made mandatory for all the indigenous producers. Since NCU cannot be used for industrial purposes, illegal diversion of subsidised urea to non-agricultural use would not be possible. By curbing this illegal diversion of urea for non-agricultural purposes, the government aims to prevent subsidy leakages.

New Investment Policy

New Investment Policy was launched in 2013 to facilitate fresh investment in urea sector and to make India self-sufficient in it. Further an amendment was brought in to give benefits to only those units whose production starts within five years from the amendment. Subsidy will be given only upon domestic sale as at present for a period of 8 years from the date of start of production. Thereafter, the units will be governed by the urea policy prevalent at that time.

Public Sector Undertakings

Fertiliser Corporation of India Limited

Incorporated in 1961, FCI was reorganised along with National Fertilisers Corporation Ltd (NFCL) from 1978 into five companies namely, FCI, NFL, Hindustan Fertilizer Corporation Ltd. (HFCL), Rashtriya Chemicals and Fertilisers Ltd. (RCFL) and Projects and Development India Ltd. (PDIL). Following re-organisation, FCI comprised four units located at Sindri (Jharkhand), Gorakhpur (Uttar Pradesh), Ramagundam (Andhra Pradesh) and Talcher (Odisha), with a total annual capacity of 5.87 lakh MT of nitrogen besides an abandoned project at Korba (Chhattisgarh).

Website: www.fertcorpindia.nic.in

Hindustan Fertiliser Corporation Limited

The Hindustan Fertilizer Corporation Limited (HFCL) was incorporated in 1978 as a result of the reorganisation of the erstwhile Fertilizer Corporation of India Limited (FCIL), and NFL Group of Companies. The HFCL comprised Barauni Unit (Bihar), Durgapur Unit and Haldia Project (West Bengal) and Namrup Unit (Assam). The Namrup Unit was hived off from 2002 to form a separate entity with the name of Brahmaputra Valley Fertilizer Corporation Ltd (BVFCL).

Rashtriya Chemicals and Fertilisers Limited

Rashtriya Chemicals and Fertilisers Limited (RCF) was incorporated as a separate company in 1978 as a result of reorganisation of the erstwhile Fertilizer Corporation of India Limited. At the time of its formation, the company had only one operating unit at Trombay (near Mumbai) and two major projects under implementation, viz., Trombay-IV and Trombay-V expansion. The gas-based Thal-Vaishet fertilizer complex about 100 kms from Trombay, was later implemented by RCF and it commenced commercial production in 1985.

Website : www.rcfltd.com

National Fertilisers Limited

National Fertilisers Limited (NFL) was incorporated in 1974 for setting up two nitrogenous plants, at Bathinda (Punjab) and Panipat (Haryana) with LSHS as fee stock, each having urea production capacity of 5.11 lakh MT per annum. Consequent upon the reorganisation of the

FCI, the Nangal Unit (including Nangal Expansion Project) of FCI was also transferred to NFL in 1978.

Website: www.nationalfertilizers.com

Projects and Development India Limited

Projects and Development India Limited (PDIL), an erstwhile division of the Fertiliser Corporation of India was registered as a separate company in 1978. The company has its registered office at Noida, Uttar Pradesh.

Website: www.pdilin.com

Fertilisers and Chemicals Travancore Limited

Fertilisers and Chemicals Travancore Limited (FACL) was incorporated in 1943. In 1947, FACL started production of ammonium sulphate with an installed capacity of 50,000 MT per annum at Udyogamandal, near Cochin (now Kochi). In 1980, FACL became a PSU and towards the end of 1982, the government became a major shareholder. From a modest beginning, FACL has grown and diversified into a multi-division, multi-function organisation with basic interest in manufacture and marketing of fertilisers and petro-chemicals, engineering consultancy and design and in fabrication and erection of industrial equipment.

Website: www.fact.co.in

Madras Fertilisers Limited

Madras Fertilisers Limited (MFL) was incorporated in 1906 as a joint venture between GOI and AMOCO India Incorporation of USA (AMOCO) with GOI holding 51 per cent of the equity share capital in 1985. AMOCO disinvested their shares, which were purchased by GOI and NIOC in their respective proportions in 1985. The revised shareholding pattern was: GOI 67.55 per cent and NIOC 32.45 per cent.

Website: www.madrasfert.co.in

Brahmaputra Valley Fertiliser Corporation Limited

Brahmaputra Valley Fertiliser Corporation Limited (BVFCL) has two operating units at Namrup, Assam. Its corporate office is also situated at Namrup. The other establishments of the company are liaison offices at Noida and Kolkata and marketing offices at Guwahati, Siliguri and Patna.

Website: www.bvfcl.com

FCI Aravali Gypsum and Minerals India Limited

FCI Aravali Gypsum and Minerals India Limited was incorporated under the Companies Act, 1956 as a public sector undertaking in 2003 after being hived off the Jodhpur Mining Organisation (JMO) of Fertiliser Corporation of India Limited (FCIL).

Website: www.fagmiI.nic.in

Chemicals and Petro-chemicals

The Department of Chemicals and Petro-chemicals was under the Ministry of Industry until 1989, when it was brought under the Ministry of Petroleum and Chemicals. In 1991, the Department of Chemicals and Petro-chemicals was transferred to the Ministry of Chemicals and Fertilisers. The Department is entrusted with the responsibility of planning, development and regulations of the chemicals, petro-chemicals and pharmaceutical industry sector, inducting: drugs and pharmaceuticals, excluding those specifically allotted to other departments; insecticides excluding the administration of the Insecticides Act, 1968; molasses; alcohol - industrial and potable from the molasses route; all organic and inorganic chemicals not specifically allotted to any other ministry or department; petro-chemicals; synthetic rubber; and planning, development and control of, and assistance to, all industries dealt with by the Department.

Website: www.chemicals.nic.in

Chemicals and Petro-chemicals Industry

The chemicals and petro-chemical industry is a knowledge and capital intensive industry. It is an integral constituent of the growing Indian Industry. It includes basic chemicals and its products, petro-chemicals, Fertilisers, paints, varnishes, gases, soaps, perfumes and toiletry and pharmaceuticals. This industry occupies a pivotal position in meeting basic needs and improving quality of life. This industry is the mainstay of industrial and agricultural development of the country and provides building blocks for several downstream industries, such as textiles, papers, paints, soaps, detergents, pharmaceuticals, varnish, etc.

India produces a large number of fine and speciality chemicals, which have very specific uses and find wide usage as food additives, pigments, polymer additives and anti-oxidants in the rubber industry, etc. In the chemical sector, 100 per cent FDI is permissible. Manufacture of most of the chemical and petro-chemical products is delicensed. The entrepreneurs need to submit an Industrial Entrepreneurs' Memorandum (IEM) to the Department of Industrial Policy and Promotion provided no locational angle is applicable. Only the following items are covered in the compulsory licensing list because of their hazardous nature: hydrocyanic acid and its derivatives; phosgene and its derivatives; and isocynates and di-isocynates of hydrocarbons.

Department of Chemicals and Petro-chemicals is implementing the three schemes under the National Policy on Petrochemicals: (i) setting up of plastic parks; (ii) setting up of Centres of Excellence in Polymer Technology; and (iii) national awards for technology innovation in petrochemical and downstream plastic processing industry.

Petroleum Chemical and Petrochemical Investment Regions

The Petroleum Chemical and Petrochemical Investment Regions (PCPIR) Policy, is to promote the petroleum chemical and petrochemical sector in an integrated and environment-friendly manner on a large scale. The policy document put in place in 2007 is also available on the website of the Department, www.chemicals.nic.in

Hindustan Organic Chemicals Limited

Hindustan Organic Chemicals Limited (HOCL) was incorporated in 1960 with the objective of attaining self-reliance in basic organic chemicals. The company has two manufacturing units located at Rasayani (Maharashtra) and Kochi (Kerala). The Rasayani unit (Phenol Complex) commenced production from 1987-88. HOCL is the sole manufacturer of strategically important N_2 O_4 (Dinitrogen Tetroxide) in India which is supplied by the company to ISRO for its satellites launching programme. HOCL has a subsidiary company M/s Hindustan Fluorocarbons Limited (HFL) located at Rudraram, Telangana, which manufactures Poly tetra fluro ethylene (PTFE), a high tech engineering plastic, and chloro di-fluoro methane (CFM-22).

Website: www.hoclindia.com

Hindustan Insecticides Limited

Hindustan Insecticide Limited (HIL) was incorporated in 1954 for manufacture and supply of Dichloro-Diphenyl-Trichloroethane (DDT). In 1957, the company set up a factory at Udyogmandal, Kerala, for manufacture of DDT and in 1977 at Rasayani, Maharashtra, for manufacture of Malathion, an insecticide. The third unit of HIL was set up at Bhatinda, Punjab, in 2003. Rasayani and Udyogmandal Plants have both DDT manufacturing and agrochemical manufacturing facilities while Bathinda has only formulations manufacturing and packaging facility.

HIL is the sole supplier of DDT to the National Vector Borne Disease Control Programme (NVBDCP) of the Ministry of Health and Family Welfare, Government of India. DDT accounts for almost 50 per cent of the company's turnover. The company exports DDT to some African countries and other products like malathion and mancozeb to countries like Brazil and Argentina. HIL diversified into agro chemicals in the late 1970s to ensure supply of quality pesticides at reasonable prices to the agricultural sector and has a range of technical and formulation grade pesticides. To further consolidate its position, it has also ventured into the seed business. It has got the status of National Level Seed Agency (NLA) from the Union Ministry of Agriculture and is producing and supplying seeds under Government sponsored schemes like National Food Security Mission (NFSM), National Mission on Oilseed and Oil Palm (NMOOP) and Mission on Integrated Development of Horticulture (MIDH). In addition, company has diversified into fertiliser segment as well to provide a single stop window for the range of agriculture inputs i.e., pesticides, seeds and fertilisers.

Website: www.hil.gov.in

Hindustan Flourocarbons Ltd

Hindustan Fluorocarbons Ltd. (HFL), a subsidiary company of Hindustan Organic Chemicals Ltd. (HOCL), was incorporated in 1983. It is located at Rudraram, District Medak, Telangana. The company started production in 1987 and is engaged in the manufacture of Poly Tetra Fluoro Ethylene (PTFE) and of Chloro Di Fluoro Methane (CFM-22). PTFE is extensively used in chemical, mechanical, electrical and electronic industries and has strategic applications in defence and

aerospace sectors. CFM-22 is used as a refrigerant and for production of PTFE.

Website: www.hfl.co.in

Assam Gas Cracker Project - Brahmaputra Cracker & Polymer Limited

The Assam Gas Cracker Project (AGCP) was initiated in pursuance of the Memorandum of Settlement signed between central government, All Assam Students Union (AASU) and All Assam Gana Parished (AAGP) in 1985. This project is of economic significance for Assam and the North East Region. The AGCP was dedicated to the nation in 2016.

Central Institute of Plastics Engineering and Technology

Central Institute of Plastics Engineering & Technology (CIPET), a premier 15 9001:2008 QMS, ISO/IEC -17025, ISO/IEC-17020 certified Plastics Institute under the aegis of Department of Chemicals & Petro-chemicals, was established in 1968. The diversified activities of CIPET include skill development, technology support to industry, academics and research and development (STAR) in the field of plastics engineeing techology, i.e., design, CAD/CAM/CAE, tooling, plastics processing, testing and quality assurance, etc. The reach of CIPET has been expanded and it is now operating at 30 centres in 18 states across the country. These are 5 High Learning Centres (HLCs) providing undergraduate, postgraduate and doctoral programmes in affiliation with respective state universities; 12 diploma centres focus on diploma and skill-oriented programme; 6 Vocational Training Centres (VTCs) provide Vocational Skill Development training programmes aimed at gainful employment to unemployed and underemployed youth; 3 R&D Wings involved in application-oriented research in the niche areas of Plastics Engineering and Technology; 3 Specialised Centres provide academic programmes and technology support services relevant to their respective specialised domains and operator-level training programmes in plastics processing and recycling technology; and one polymer data service centre deals with creation of database.

Institute of Pesticide Formulation Technology

Institute of Pesticide Formulation Technology (IPFT) was established in 1991 as an autonomous institution under the Department of Chemicals and Petro-chemicals. IPFT is a NABL accredited laboratory for testing of

pesticides technical and formulation, pesticide residues in various food matrices and CWC related chemicals. One of the main objectives of the institute is the development of user and environment-friendly pesticide formulation technology. IPFT has established a healthy support with the Pesticide Industries and has been able to successfully transfer more than fifty formulation technologies to Indian and foreign companies.

Pharmaceuticals

The Department of Chemicals and Petro-chemials was under the Ministry of Industry until 1989, when it was brought under the Ministry of Petroleum and Chemicals. In 1991, the Department of Chemicals and Petro-chemicals was transferred to the Ministry of Chemicals and Fertilisers. The Department is entrusted with the responsibility of planning, development and regulations of the chemicals, petro-chemicals and pharmaceutical industry sector.

Website: www.pharamaceuticals.gov.in

Pharmaceuticals Pricing Policy

The Department notified the National Pharmaceutical Pricing Policy-2012 (NPPP-2012) in 2012 with the objective to put in place a regulatory framework for pricing of drugs to ensure availability of required medicines - "essential medicines" - at reasonable prices, even while providing sufficient opportunity for innovation and competition to support the growth of industry, thereby meeting the goals of employment and shared economic well-being for all.

Subsequently, to implement the NPPP-2012, the new Drugs (Prices Control) Order, 2013, was notified in 2013 to control the prices of specified dosages and strengths as under National List of Essential Medicines-2011 (NLEM-2011). This was modified to include medicines included in NLEM-2015 in 2016 after the same was received from Ministry of Health and Family Welfare that had constituted an Expert Core Committee to review and recommend the revision of National List of Essential Medicines (NLEM-2011) in the context of contemporary knowledge of use of therapeutic products.

Medical Devices

Medical Devices industry is a multi-product industry, producing a wide range of products. India is growing as a key market for Medical Devices and Diagnostics. Indian Medical Devices industry depends on imports up to an extent of almost 70 per cent. Most hi-tech innovative products and technology originate from a well-developed ecosystem and innovation cycle which needs to be developed in India to promote indigenous industry and to reduce our dependence on imports. In 2014, the government launched the "Make in India" campaign, with the objective of making India a global manufacturing hub, thus bringing foreign technology and capital into the country.

Medical Device Segments

The medical device market encompasses a wide range of products from relatively low value items such as syringes and needles to the high value equipment such as city scans and cath labs, etc. The medical devices industry can be broadly classified as consisting of: (a) medical disposables and consumables; (b) medical electronics, hospital equipment, surgical instruments; (c) implants; and (d) diagnostic reagents.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana

The Jan Aushadhi Scheme was launched in 2008 with the aim of selling affordable generic medicines through dedicated sales outlets, i.e., Jan Aushadhi Stores in various districts across the country. Some of the objectives of the Scheme include: ensure access to quality medicines; extend coverage of quality generic medicines so as to reduce and thereby redefine the unit cost of treatment per person; and create awareness about generic medicines through education and publicity so that quality is not synonymous with only high price. The first Jan Aushadhi Store was opened in Amritsar, Punjab in 2008. The original target of the campaign was to establish Jan Aushadhi Stores in every district of our country. Recently, "Pradhan Mantri Jan Aushadhi Yojana" (PMJAY) has been renamed as "Pradhan Mantri Bhartiya Janaushadhi Pariyojana" (PMBJP) and "Pradhan Mantri Jan Aushadhi Kendra" (PMJAK) as "Pradhan Mantri Bhartiya Janaushadhi Kendra" (PMBJK).

Indian Drugs and Pharmaceuticals Limited

Indian Drugs and Pharmaceuticals Limited (IDPL) was incorporated in 1961 with the primary objective of creating self-sufficiency in

essential life-saving drugs and medicines. The company has presently three manufacturing plants, one each at Rishikesh (Uttarakhand), Hyderabad (Andhra Pradesh) and Gurgaon (Haryana). IDPL has two wholly owned subsidiaries, namely, IDPL Ltd., Chennai (Tamil Nadu) and Bihar Drugs and Organic Chemicals Ltd. at Muzaffarpur (Bihar). In addition, IDPL has two joint sector undertakings, promoted in collaboration with the respective state governments. These are Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL), Jaipur, and Orissa Drugs and Chemicals Ltd. (ODCL), Bhubaneshwar. However, the government has decided to de-link RDPL from IDPL and the process of delinking is underway.

Website: www.idplindia.in

Bengal Chemicals and Pharmaceuticals Limited

Bengal Chemicals and Pharmaceuticals Limited (BCPL) was a sick company in the private sector in the name and style of Bengal Chemicals and Pharmaceuticals Works. A new public sector company in the name and style of Bengal Chemicals and Pharmaceuticals Limited (BCPL) was incorporated in 1961 .The company has four manufacturing units—one each at Maniktala at Kolkata, Panihati at North 24 Parganas (West Bengal), one at Mumbai (Maharashtra) and one at Kanpur (UP). The company manufactures and markets a wide range of industrial chemicals, a large number of drugs and pharmaceuticals besides cosmetics and home products. In the home products, the well-known products include Cantharidine Hair Oil and Lamp Brand Phenol.

Website: www.bengalchemicals.co.in

Mines and Minerals

Ministry of Mines is responsible for survey and exploration of all minerals, other than natural gas, petroleum and atomic minerals; for mining and metallurgy of non-ferrous metals like aluminium, copper, zinc, lead, gold, nickel, etc., and for administration of the Mines and Minerals (Regulation and Development) Act, 1957, and rules made thereunder in respect of all mines and minerals other than coal, natural gas and petroleum as well as Offshore Areas Mineral (Development and Regulation) Act, 2002 and rules made thereunder.

The Ministry is responsible for legislation for regulation of mines and development of minerals within the territory of India, including mines and minerals underlying the ocean within the territorial waters or the continental shelf, or the exclusive economic zone and other maritime zones of India as may be specified, from time to time by or under any law made by Parliament; regulation of mines and development of minerals other than coal, lignite and sand for stowing and any other mineral declared as prescribed substances for the purpose of the Atomic Energy Act, 1962 (33 of 1962) as declared by law, including questions concerning regulation and development of minerals in various states and the matters connected therewith or incidental thereto; all other metals and minerals not specifically allotted to any other Ministry/Department, such as aluminium, zinc, copper, gold, diamonds, lead and nickel; planning, development and control of, and assistance to, all industries dealt with by the Ministry; and the administration and management of Geological Survey of India, Indian Bureau of Mines.

Website: www.mines.gov.in

Mineral Legislation and Reforms

The Central Act to provide for the development and regulation of mines and minerals is the Mines and Minerals (Development and Regulation) Act, 1957, which came into force in 1958. Section 13 of the MMDR Act empowers the central government to formulate rules for regulation of grant of mineral concessions for major minerals; in accordance of which Mineral Concession Rules, 1960, have been framed. Section 18 of MMDR Act, 1957, empowers the central government to frame rules for the conservation and systematic development of minerals and for the protection of environment in accordance of which Mineral Conservation and Development Rules, 1988, have been framed. Section 15 of MMDR Act, 1957, empowers state governments to frame rules for regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals; accordingly, all state governments and some union territories have framed their own rules in this regard.

The central government framed the following rules to give effect to the newly amended provision of the said Act and also give boost to the mining sector. The newly framed Rules are listed as The Minerals

(Evidence of Mineral Contents) Rules, 2015; The Minerals (Non-exclusive Reconnaissance Permits) Rules, 2015; The Mineral (Auction) Rules, 2015; The Minerals (Mining by Government Companies) Rules, 2015; The Mines and Minerals (Contribution to District Mineral Foundation) Rules, 2015; The National Exploration Trust Rules, 2015; The Minerals (Other than Atomic and Hydrocarbons Energy Mineral Concession) Rules, 2016; The Minerals (Transfer of Mining Lease Granted Otherwise than through Auction for Captive Purpose) Rules, 2016; The Atomic Minerals Concession Rules, 2016; and The Mineral Conservation and Development Rules, 2017.

National Mineral Exploration Trust

The government notified National Mineral Exploration Trust Rules, 2015 and has also established National Mineral Exploration Trust (NMET) in pursuance of subsection (1) of Section 9C of the Mines and Minerals (Development and Regulation) Amendment Act, 1957, with the primary objective to promote regional and detailed mineral exploration in the country to increase overall mineral production and achieve sustainable development of the mineral sector.

Pradhan Mantri Khanij Kshetra Kalyan Yojana

The government launched Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) which is to be implemented by the district mineral foundations of the respective districts. PMKKKY will help in creating a congenial mining environment, ameliorate the condition of the affected person and create a win-win situation for the stakeholders. A national portal for DMF is being developed which will help monitor the implementation of projects under the PMKKKY scheme. The monitoring of PMKKKY would be done under "DISHA", the District Development Coordination and Monitoring Committee of Ministry of Rural Development, to promote synergy and convergence for greater impact.

National Mineral Exploration Policy

Government unveiled National Mineral Exploration Policy, 2016 (NMEP), which spells out the strategy and outlines the action plan that the government will adopt to ensure comprehensive exploration of country's mineral resources (non-fuel and non-coal). The NMEP primarily aims at accelerating the exploration activity in the country through enhanced participation of the private sector.

Transparency, Auction, Monitoring and Resource Augmentation

To facilitate and expedite various clearances/approvals required after the mineral block is allocated, an Inter-ministerial Group has been constituted to expedite the requisite clearances to enable the early start of mining activity. The Ministry has developed a Transparency, Auction, Monitoring and Resource Augmentation (TAMRA) portal and mobile application. This will be an interactive platform for all stakeholders to compress the timelines for statutory/other clearances.

Star Rating of Mines

The Ministry of Mines launched in 2016, a Scheme for Star Rating of Mines/ Mining Leases for implementation of Sustainable Development Framework (SDF). The Star Ratings are to be awarded, based on evaluation of performance of mines on techno, socio-economic and environmental parameters and give objective reporting of their activities. It has been instituted as a two-tier system providing self-evaluation templates to be filled in by the mine operators followed by validation through Indian Bureau of Mines.

Mining Surveillance System

To curb the menace of illegal mining, a satellite-based monitoring system namely Mining Surveillance System (MSS), was developed and launched which aims to establish a regime of responsive mineral administration through automatic remote sensing detection technology. The latest satellite image is juxtaposed on geo-referenced mining lease maps to check any illegal mining in the vicinity.

Mineral Resources

The classification of reserves/resources of various minerals based on United Nations Framework Classification (UNFC) was done in April 2010, following which National Mineral Inventory was prepared. The UNFC consists of a three dimensional system with three axes—economic viability; feasibility assessment; and geological assessment. India produces more than 90 minerals, prominent among them are given here. The figures included are the latest available.

Bauxite

Total resources of bauxite as per UNFC in the country are placed at 3,897 million tonnes. These resources include 656 million tonnes

reserves and 3,240 million tonnes remaining resources. By grades, about 81 per cent resources are of metallurgical grade. The resources of refractory and chemical grades are limited and together account for about 5 percent. Odisha alone accounts for 51 percent of country's resources of bauxite followed by Andhra Pradesh (16 per cent), Gujarat (9 per cent), Jharkhand (6 per cent), Maharashtra (5 per cent) and Chhattisgarh and Madhya Pradesh (4 per cent each). Major bauxite resources are concentrated in the east coast of Odisha and Andhra Pradesh.

Chromite

As per UNFC system, total resources of chromite in the country as in 2015 are estimated at 344 million tonnes, comprising 102 million tonnes reserves (30 per cent) and 242 million tonnes remaining resources (70 per cent). About 96 per cent resources of chromite are located in Odisha, mostly in the Sukinda valley in Jajpur and Keonjhar districts. Minor deposits are scattered over Manipur, Nagaland, Karnataka, Jharkhand, Maharashtra, Tamil Nadu and Andhra Pradesh and Telangana. Gradewise, charge-chrome grade accounts for 31 per cent resources followed by ferrochrome grade (18 per cent), beneficiable grade (25 per cent) and refractory grade 14 per cent. Low, others, unclassified and not-known grades together account for 13 per cent.

Copper

The total resources of copper ore in the country as in 2015 are estimated at 1511.50 million tonnes with about 12.16 million tonnes of the copper metal. Of these, 207.77 million tonnes (13.74 per cent) fall under Reserve category containing 2.73 million tonnes of copper metal and the balance 1303.73 million tonnes (86.26 per cent) are 'Remaining Resources' containing 9.42 million tonnes of copper metal. Rajasthan is credited with 813.33 million tonnes ore (54 per cent) containing 4.48 million tonnes of copper metal; Madhya Pradesh 283.43 million tonnes ore (19 per cent), containing 3.42 million tonnes copper; Jharkhand, 295.39 million tonnes ore (20 per cent), containing 3.28 million tonnes of copper metal; and the rest 7 per cent are accounted for by other states namely Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Meghalaya, Nagaland, Odisha, Sikkim, Tamil Nadu, Telangana, Uttarakhand and West Bengal.

Gold

As per UNFC system, as in 2015, the total resources of gold ore (primary and placer) in the country were estimated at 527.96 million tonnes. Out of these, 17.23 million tonnes were placed under reserves category and the remaining 510.73 million tonnes under remaining resources category. Total resources of gold (primary), in terms of metal, stood at 654.74 tonnes. Out of these, 70.09 tonnes were placed under reserves category and 584.65 tonnes under remaining resources category. The resources include placer-type gold ore in Kerala estimated at 26.12 million tonnes containing 5.86 tonnes gold metal.

The largest resources in terms of gold ore (primary) are located in Bihar (44 per cent) followed by Rajasthan (25 per cent) and Karnataka (21 per cent), West Bengal, and Andhra Pradesh (3 per cent each), Telangana & Madhya Pradesh (2 per cent each). Remaining very small quantity of resources of ore are located in Chhattisgarh, Jharkhand, Kerala, Maharashtra and Tamil Nadu. In terms of metal content, Karnataka remained on top followed by Rajasthan, Bihar, Andhra Pradesh, Jharkhand, etc.

Iron Ore

Hematite and magnetite are the most important iron ores in India. About 59 per cent hematite ore deposits are found in the eastern sector. About 92 per cent magnetite ore deposits occur in southern sector, especially in Karnataka. Of these, hematite is considered to be superior because of its higher grade. Indian deposits of hematite belong to the precambrian iron ore series and the ore is within banded iron ore formations occurring as massive, laminated, friable and also in powdery form.

As per UNFC system, the total resources of hematite as in 2015 are estimated at 22,487 million tonnes, of which 5,442 million tonnes (24 per cent) are under ‘reserves’ category and the balance 17,045 million tonnes (76 per cent) are under ‘remaining resources’ category. By grades, lumps constitute about 56 per cent followed by fines (21 per cent), lumps with fines (13 per cent) and the remaining 10 per cent are black iron ore, not-known and other grades. Major resources of hematite are located in Odisha - 7,559 million tonnes (34 per cent); Jharkhand -5,286 million tonnes (24 per cent); Chhattisgarh - 4,858 million tonnes (22 per cent); Karnataka - 2,467 million tonnes (11 per cent); and Goa - 1,189 million

tonnes (5 per cent). The balance resources of hematite are spread in Andhra Pradesh, Assam, Bihar, Maharashtra, Madhya Pradesh, Meghalaya, Rajasthan and Uttar Pradesh.

Magnetite is another principal iron ore that also occurs in the form of oxide, either in igneous or metamorphosed banded magnetite-silica formation, possibly of sedimentary origin. As per the UNFC system, the total resources of magnetite as in 2015 are estimated at 10,789 million tonnes, of which 'reserves' constitute a mere 53 million tonnes while 10,736 million tonnes are placed under 'remaining resources'. Classification on the basis of grades shows 20 per cent resources of metallurgical grade while 80 per cent resources belong to unclassified, not-known and other grades. The resources of coal washery and foundry grades constitute meagre proportions. India's 96 per cent magnetite resources are located in four states, namely, Karnataka - 7,802 million tonnes (72 percent) followed by Andhra Pradesh - 1,392 million tonnes (13 per cent); Rajasthan - 617 million tonnes (6 per cent) and Tamil Nadu - 507 million tonnes (5 per cent); and Assam, Bihar, Goa, Jharkhand, Kerala, Maharashtra, Meghalaya and Nagaland together account for the remaining 4 per cent resources.

Lead and Zinc

The total resources of lead and zinc ores as in 2015 as per UNFC system, are estimated at 749.46 million tonnes. Of these, 106.12 million tonnes (14 per cent) fall under 'reserves' while balance 643.34 million tonnes (86 per cent) are classified as 'remaining resources'. The resources of ore containing + 10 per cent Pb and Zn were estimated at 124.33 million tonnes; ore containing 5 to 10 per cent Pb and Zn were 329.88 million tonnes; and ore containing less than 5 per cent Pb and Zn were 295.35 million tonnes.

Rajasthan is endowed with the largest resources of lead-zinc ore amounting to 670.34 million tonnes (89.44 per cent), followed by Andhra Pradesh 22.69 million tonnes (3.02 per cent), Madhya Pradesh 14.84 million tonnes (1.98 per cent), Bihar 11.43 million tonnes (1.52 per cent) and Maharashtra 9.27 million tonnes (1.24 per cent). Resources are also established in Gujarat, Meghalaya, Odisha, Sikkim, Tamil Nadu, Uttarakhand and West Bengal.

Manganese Ore

The total resources of manganese ore in the country as in 2015 are placed at 496 million tonnes as per UNFC system. Out of these, 94 million tonnes are categorised as reserves and the balance 402 million tonnes are in the remaining resources category. Grade-wise, ferro-manganese grade accounts for 7 per cent, medium grade 11 per cent, BF grade 28 per cent and the remaining 54 per cent are of mixed, low, others, unclassified, and not-known grades including 0.17 million tonnes of battery/chemical grade.

State-wise, Odisha tops the total resources with 44 per cent share followed by Karnataka with 22 per cent, Madhya Pradesh with 12 per cent, Maharashtra and Goa with 7 per cent each, Andhra Pradesh with 4 per cent and Jharkhand with 2 per cent; and Rajasthan, Gujarat and West Bengal together shared the remaining about 2 per cent resources.

Nickel

Important occurrence is nickeliferous limonite in the overburden of chromite in Sukinda Valley, Jajpur district, Odisha, where it occurs as an oxide. A suitable process is being developed for its utilisation. Nickel also occurs in sulphide form along with copper mineralisation in East Singhbhum district, Jharkhand. In addition, it is found associated with uranium deposits at Jaduguda, Jharkhand and a process is being developed for its recovery. Other reported occurrences of nickel are from Karnataka, Kerala and Rajasthan. Polymetallic sea nodules are another sources of nickel. As per UNFC, as in 2015, the total resources of nickel ore have been estimated at 189 million tonnes. About 92 per cent resources, i.e., 175 million tonnes are in Odisha. The remaining 8 per cent resources are distributed in Jharkhand (9 million tonnes) and Nagaland (5 million tonnes). Nominal resources are reported from Karnataka (0.23 million tonnes).

Tungsten

The total resources of tungsten ore in the country, as per the UNFC system, as in 2015 have been estimated at 87.4 million tonnes containing 1,42,094 tonnes W03 content. All these resources are placed under ‘remaining resources’ category. Resources are mainly distributed in Karnataka (42 per cent), Rajasthan (27 per cent), Andhra Pradesh (17 per cent) and Maharashtra (9 per cent). Remaining 5 percent resources are in Haryana, Tamil Nadu, Uttarakhand and West Bengal. At Degana,

Rajasthan, W03 value in vein deposits varies from 0.13 to 0.80 per cent while in gravel deposit, it is, on an average 0.04 per cent. In Sirohi deposit, Rajasthan, W03 content ranges from 0.18 to 0.51 per cent.

Barytes

The total resources of barytes in India as in 2015 as per the UNFC system are placed at 86.7 million tonnes constituting 59.2 per cent reserves and 40.8 per cent remaining resources. By grades, 64 per cent resources are of oil-well drilling grade followed by 6 per cent of chemical grade, 0.5 per cent of paint grade and 27 per cent constitute low grade. About 2.5 per cent resources are of other, unclassified and not-known categories. Andhra Pradesh alone accounts for 92 per cent of the country's barytes resources followed by Telangana and Rajasthan.

Diamond

Diamond occurrences are reported since pre-historic times in the country. Presently, diamond fields of India are grouped into four regions: (i) South Indian tract of Andhra Pradesh, comprising parts of Anantapur, Cuddapah, Guntur, Krishna, and Kurnool districts and Mahaboobnagar in Telangana; (ii) Central Indian tract of Madhya Pradesh, comprising Panna belt and Chhatarpur districts; (iii) Behradin-Kodawali area in Raipur district and Tokapal, Dugapal, etc. areas in Bastar district of Chhattisgarh; and (iv) Eastern Indian tract mostly of Odisha, lying between Mahanadi and Godavari valleys.

As per the UNFC system as in 2015, all India resources of diamond are placed at around 31.84 million carats. Out of these, 0.96 million carats are placed under reserves category and 30.87 million carats under remaining resources category. By grades, about 2.38 per cent resources are of gem variety, 2.64 per cent of industrial variety and bulk of the resources (95 per cent) are placed under unclassified category. By states, Madhya Pradesh accounts for about 90.18 per cent resources followed by Andhra Pradesh 5.73 per cent and Chhattisgarh 4.10 per cent.

Dolomite

Dolomite occurrences are widespread in the country. As per the UNFC system, as on April 1, 2015, total resources of dolomite are placed at 8,415 million tonnes, out of which 679 million tonnes are placed under reserves category. Major share of about 88 per cent resources was

distributed in eight states: namely, Madhya Pradesh (27 per cent); Andhra Pradesh (15 per cent); Chhattisgarh (11 per cent); Odisha (10 per cent); Karnataka and Rajasthan (7 per cent each); Gujarat (6 per cent); and Maharashtra (5 per cent). The remaining 12 per cent resources are distributed in Arunachal Pradesh, Jharkhand, Haryana, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh and West Bengal.

Fire Clay

India possesses substantial reserves of fire clay. The best deposits occur in association with the coal seams in the lower Gondwana coalfields of Andhra Pradesh, Jharkhand, West Bengal, Madhya Pradesh and Neyveli lignite fields in Tamil Nadu. Notable occurrences of fire clay, not associated with coal measures, are reported in Gujarat, Jabalpur region of Madhya Pradesh and Belpahar-Sundergarh areas of Odisha. Reserves and resources of fire clay as per UNFC system of 2015 are estimated at 723 million tonnes. Out of the total resources, Odisha accounts for 24 per cent followed by Madhya Pradesh (18 per cent), Tamil Nadu (16 per cent), Jharkhand (9 per cent) and Rajasthan and Gujarat (8 per cent each). Grade-wise, refractory-plastic grade accounts for 37 per cent followed by refractory-unspecified (14 per cent) and refractory-non-plastic/semi-plastic (16 per cent). The remaining 33 per cent are of others, unclassified and not-known grades.

Fluorspar

As per the UNFC system, the total resources of fluorite in the country as in 2015 are estimated at 18.18 million tonnes. Out of these, 0.29 million tonnes are placed under ‘reserves’ category. By states, Gujarat accounts for 66 per cent of the total resources having 12 million tonnes, followed by Rajasthan with 5.24 million tonnes (29 per cent), Chhattisgarh 0.55 million tonnes (3 per cent) and Maharashtra 0.39 million tonnes (2 per cent). Grade-wise, the resources are classified into marketable grade which accounted for 81 per cent of the total resources, followed by low grade (17 per cent) and unclassified grade (2 per cent).

Gypsum

As per UNFC system, the total resources of mineral gypsum in India as in 2015 are estimated at 1,330 million tonnes of which 37 million tonnes have been placed under ‘reserves’ and 1,293 million tonnes under ‘remaining resources’ category. Of the total resources, fertiliser/pottery

grade accounts for about 80 per cent and cement/paint grade 13 per cent. The unclassified and not-known grades together account for 5 per cent resources. The remaining two percent of resources is shared by surgical plaster and soil reclamation grades. By states, Rajasthan alone accounts for 81 per cent resources and the former state of Jammu & Kashmir 14 per cent resources. The remaining 5 per cent resources are in Tamil Nadu, Gujarat, Himachal Pradesh, Karnataka, Uttarakhand, Andhra Pradesh and Madhya Pradesh.

Graphite

Graphite occurrences are reported from various states but the deposits of economic importance are located in Andhra Pradesh, Jharkhand, Karnataka, Kerala, Odisha, Rajasthan and Tamil Nadu. As per the UNFC system, the total resources of graphite as in 2015 are placed at about 194.89 million tonnes, comprising 7.96 million tonnes in the reserves category and 186.93 million tonnes under remaining resources category. Arunachal Pradesh accounts for 37 per cent of total resources; followed by Jammu and Kashmir (32 per cent); Odisha (10 per cent); Jharkhand (9 per cent); and Tamil Nadu (4 per cent). However, in terms of reserves, Jharkhand has a leading share of about 52 per cent followed by Tamil Nadu (41 per cent).

Ilmenite

Ilmenite and rutile along with other heavy minerals are important constituents of beach sand deposits found right from Ratnagiri coast (Maharashtra) in the west to Odisha coast in the east. These minerals are concentrated in Kerala, Tamil Nadu, Odisha and Andhra Pradesh. As per the UNFC system, the total resources of ilmenite as in 2015 are estimated at 355.48 million tonnes (including leucoxene), inclusive of indicated, inferred and speculative categories.

Kaolin

Kaolin or China Clay resources in the country as per UNFC system in 2015 have been placed at 2,941.25 million tonnes. The reserves constitute only about 8 per cent of the resources at 229.47 million tonnes. The resources are spread over in a number of states, of which Kerala holds about 23 per cent; followed by West Bengal 14 per cent; Rajasthan 18 per cent; Odisha 10 per cent; and Karnataka 9 per cent. Out of total resources, about 26 per cent or 771 million tonnes fall under

ceramic/pottery grade; 4 per cent are classified under chemical, paper filler and cement grades; and about 70 per cent or 2,040 million tonnes resources fall under mixed grade, others, unclassified and not-known categories.

Kyanite and Sillimanite

The total resources of kyanite as per UNFC system in the country in 2015 are placed at 105 million tonnes. State-wise, the share of Telangana is 46 percent of total resources followed by Andhra Pradesh 30 per cent, Karnataka 13 per cent and Jharkhand 7 per cent. Remaining 4 per cent resources are in Kerala, Maharashtra, Rajasthan, Tamil Nadu and West Bengal.

The total resources of sillimanite as per UNFC system in the country in 2015 are placed at 70.2 million tonnes. The resources are located mainly in Tamil Nadu and Odisha (25 per cent each), Uttar Pradesh (16 per cent); Andhra Pradesh (13 per cent); Kerala (10 per cent); and Assam (7 per cent). Remaining 4 per cent resources are in Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Rajasthan and West Bengal.

Limestone

The total resources of limestone of all categories and grades as per UNFC system in 2015 are estimated at 203,225 million tonnes. Karnataka is the leading state having 27 per cent of the total resources followed by Andhra Pradesh and Rajasthan (12 per cent each), Gujarat (10 per cent), Meghalaya (9 per cent), Telangana (8 per cent) and Chhattisgarh (5 per cent). The total resources of chalk of all categories and grades as per UNFC system in 2015 are estimated in Gujarat at 6.75 million tonnes of which 5.06 million tonnes (75 per cent) are under reserves category and 1.69 million tonnes are under remaining resources category.

Mica

The most important mica-bearing pegmatites occur in Andhra Pradesh, Bihar, Jharkhand, Maharashtra and Rajasthan. Occurrences of mica pegmatites are also reported from Gujarat, Haryana, Karnataka, Kerala, Odisha, Tamil Nadu and West Bengal. As per UNFC, the total resources of mica in the country in 2015 are estimated at 635,302 tonnes. Andhra Pradesh leads with 40 per cent share in country's total resources, followed by Rajasthan (28 per cent), Odisha (16 per cent), Maharashtra

(13 per cent), Bihar (2 per cent) and balance (less than 1 per cent) in Jharkhand and Telangana.

Magnesite

The total reserves/resources of magnesite as per UNFC system in 2015 are about 394 million tonnes. Substantial quantities of resources are established in Uttarakhand (59 per cent), followed by Rajasthan (14 per cent) and Tamil Nadu (25 per cent). Resources are also located in Andhra Pradesh, Himachal Pradesh, Jammu and Kashmir, Karnataka and Kerala. Occurrences of magnesite in Tamil Nadu are low in lime and high in silica whereas those of Uttarakhand are high in lime and low in silica.

Phosphate Minerals

The total resources of apatite as per UNFC system in 2015 are placed at 24.04 million tonnes. Of the total resources, the bulk (57 per cent) is located in West Bengal followed by Jharkhand (30 per cent) and Meghalaya (5 per cent). The remaining 8 per cent resources are available in Rajasthan, Andhra Pradesh, Gujarat and Tamil Nadu. The total resources of rock phosphate as per UNFC system in 2015 are placed at 312.68 million tonnes. Of the total resources, 34 per cent are in Jharkhand, 31 per cent in Rajasthan, 19 per cent in Madhya Pradesh, and 8 per cent each in Uttar Pradesh and Uttarakhand. Meagre resources are located in Gujarat and Meghalaya.

Other Minerals

Other minerals occurring in significant quantities in India are bentonite (Rajasthan, Gujarat, Tamil Nadu, Jharkhand and Jammu and Kashmir); corundum (Karnataka, Andhra Pradesh, Rajasthan, Tamil Nadu, Telangana and Chhattisgarh); calcite (Andhra Pradesh, Rajasthan, Madhya Pradesh, Tamil Nadu, Haryana, Karnataka, Uttar Pradesh and Gujarat); fuller's earth (Rajasthan, Telangana, Arunachal Pradesh, Assam, Madhya Pradesh and Karnataka); garnet (Tamil Nadu, Odisha, Andhra Pradesh, Rajasthan and Kerala); pyrites (Bihar, Rajasthan, Karnataka, Himachal Pradesh, West Bengal and Andhra Pradesh); steatite (Rajasthan, Uttarakhand, Kerala, Maharashtra, Andhra Pradesh and Madhya Pradesh); wollastonite (Rajasthan and Gujarat); zircon (beach sands of Kerala, Tamil Nadu and Odisha); and quartz and silica minerals and granite are widespread and occur in nearly all states. Besides, the country has vast marble, slate and sandstone deposits. Marble occurs

mainly in Rajasthan, Gujarat and Jammu and Kashmir; slate in Andhra Pradesh and Haryana.

Geological Survey of India

Geological Survey of India (GSI), the premier earth science organisation of the country, is the principal provider of basic earth science information to the Government, Industry and the Geoscientific sector. Beginning in 1851 as a department engaged primarily in research for coal, GSI in its last 163 years of existence has expanded its activities manifold and has been involved either directly or indirectly in almost all areas of nation building. The vibrant steel, coal, metal, cement and power industries, which expanded phenomenally in the post independence era, bear eloquent testimony to GSI's contribution to national development.

GSI is now the custodian of one of the largest and most comprehensive earth science databases developed over the last one and half century. Its Charter of Operation laid down by the Government of India details the scope of activities and responsibilities of GSI that encompasses practically the entire gamut of earth science activities. Creation and updation of national geoscientific information and knowledge base through ground, marine and airborne surveys and their dissemination are the primary goals of GSI. The present activity domains of GSI include surface mapping; aerial and remote sensing surveys; offshore surveys; exploration for mineral and energy resources; engineering geology; geotechnical investigations; geoenvironmental studies; geology of water resources; geohazard studies; research and development; training and capacity building; and information services etc.

Website: www.gsi.gov.in

Online Core Business Integrated System and National Aerogeophysical Mapping Programme

GSI was launched in 2017 as an Online Core Business Integrated System (OCBIS) which is a state-of-the-art IT enabled system encapsulating all the main activities of GSI using an online digital platform. The workflow of GSI from data acquisition to data storage, analysis and dissemination is digitally captured in this system, besides all the administrative and financial activities of GSI. All available

baseline geoscience data of GSI is uploaded on geospatial platform for viewing and extracting free of cost.

Indian Bureau of Mines

Indian Bureau of Mines (IBM) established in March 1948, is a multi-disciplinary scientific and technical organisation under Ministry of Mines with statutory and developmental responsibilities for conservation and systematic exploitation of mineral resources other than coal, petroleum and natural gas, atomic minerals and minor minerals.

The Indian Bureau of Mines performs regulatory functions under the relevant provisions of the Mines and Mineral (Development and Regulation) Act, 1957, amended in 2015 and rules made there under namely enforcement of the Mineral Conservation and Development Rules, 2017; Minerals (Other than Atomic and Hydro Carbon Energy Minerals) Concession Rules, 2016; and other new rules and Environmental (Protection) Act, 1986 and Rules made thereunder. It also undertakes scientific, techno-economic, research-oriented studies in various aspects of mining geological studies, ore beneficiation and environmental studies.

IBM provides technical consultancy services to the mining industry for the geological appraisal of mineral resources, and the preparation of feasibility report of mining projects, including beneficiation plants. It prepares mineral maps and countrywide inventory of mineral resources of leasehold and freehold areas. It also promotes and monitors community development activities in mining areas. IBM also functions as data bank of mines and minerals and publishes statistical information. It also brings out technical publications/monographs/bulletins on mineral commodities. It advises the central and state governments on all aspects of mineral industry, trade, legislation etc. IBM has taken many initiatives towards digital India.

The Ministry of Mines has three Public Sector Undertaking (PSUs) under its administrative control. National Aluminium Company Limited (NALCO), Hindustan Copper Limited (HCL) are operating in the field of mining and mineral processing, and Mineral Exploration Corporation Limited (MECL) is operating in the field of mineral exploration.

Website: www.ibm.gov.in

National Aluminium Company Limited

National Aluminium Company Limited (NALCO) is a Navratna CPSE under Ministry of Mines. It was established in 1981 in the public sector, with its registered office at Bhubaneshwar. The Company is a group 'A' CPSE having integrated and diversified operations in mining, metal and power with sales turnover of ₹ 7,933 crore in financial year 2016-17. NALCO is one of the largest integrated Bauxite-Alumina-Aluminium-Power Complex in the country. The Company has a 68.25 lakh TPA Bauxite Mine and 21.00 lakh TPA (normative capacity) Alumina Refinery located at Damanjodi in Koraput district of Odisha, and 4.60 lakh TPA Aluminium Smelter and 1200MW Captive Power Plant located at Angul, Odisha. NALCO has bulk shipment facilities at Vizag port for export of Alumina/Aluminium and import of caustic soda and also utilises the facilities at Kolkata and Paradeep ports. The company has registered sales offices in Delhi, Kolkata, Mumbai, Chennai and Bengaluru and 11 (eleven) stockyards at various locations in the country to facilitate domestic marketing. NALCO is the first Public Sector Company in the country to venture into international market in a big way with London Metal Exchange (LME) registration since 1989. The Company is listed at Bombay Stock Exchange (BSE) since 1992 and National Stock Exchange (NSE) since 1999. Besides, ISO 9001, ISO 14001, OHSAS 18000 and SA 8000 certification, the Company has also adopted ISO 50001 standards for energy management system.

Website: www.nalcoindia.com

Hindustan Copper Limited

Hindustan Copper Limited (HCL), a Mini Ratna Government of India Enterprise under the administrative control of the Ministry of Mines, was incorporated in 1967 under the Companies Act,1956. It was established as a Government of India enterprise to take over all plants, projects, schemes and studies pertaining to the exploration and exploitation of copper deposits, including smelting and refining from National Mineral Development Corporation Ltd. It has the distinction of being the nation's only vertically integrated copper producing company as it manufactures copper right from the stage of mining to beneficiation, smelting, refining and casting of refined copper metal into downstream saleable products.

Website: www.hindustancopper.com

Mineral Exploration Corporation Limited

Mineral Exploration Corporation Limited (MECL), a Mini Ratna Company is a premier mineral exploration Public Sector Undertaking of the country with ISO 9001 -2008 certification. Since its inception in 1972, it has completed over 1,371 projects of detailed mineral exploration and mine development and has added 160 billion tonnes of mineral resources to the National Mineral Inventory. It is the leading organisation, both in government and private sectors, possessing an entire spectrum of mineral exploration facilities under one roof. Since its inception in 1972, MECL has grown from strength to strength by adopting modern techniques of exploration and it has now emerged as the premier exploration agency in the country.

Website: www.mecl.gov.in

National Institute of Rock Mechanics

National Institute of Rock Mechanics (NIRM) is the only institution in South Asia exclusively devoted to research in rock mechanics. Over the period of last 25 years, the institute has the privilege to provide its expertise to various central and state government agencies and public sector undertakings in the field of mining, hydroelectric projects, nuclear power projects, oil and gas sector and various infrastructure project authorities including rail, road, airports, hospital etc.

Website: www. nirm.in

National Institute of Miners' Health

National Institute of Miners' Health, Nagpur (NIMH), is an autonomous institute established under Ministry of Mines, with the objective of promotion of occupational health and prevention of occupational diseases among the persons employed in mining and mineral-based industries. The Institute is engaged in research and developmental activities relating to occupational health, workplace monitoring etc. The Institute has developed the brand image and reputation of providing quality comprehensive technical support services in the field of occupational health and hygiene.

Website: www.mines.gov.in

Jawaharlal Nehru Aluminium Research Development and Design Centre

The Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC), Nagpur is a Centre of Excellence setup in 1989 as a joint venture of Ministry of Mines, Government of India and UNDP, with a view to provide major R&D support system for the emerging modern aluminium industry in India. The Centre became functional in 1996. The Centre is recognised as scientific and industrial research organisation by the Department of Scientific and Industrial Research. It is the only institute of its kind in India pursuing the cause of R&D from bauxite to finished product under one roof.

The Centre caters to R&D needs of both primary and secondary aluminium producers in the basic and applied areas of bauxite, alumina and aluminium. JNARDDC has made key contribution in the areas of beneficiation; characterisation; technological evaluation; upgradation of bauxites; reduction of energy consumption and environmental pollution by the effective utilisation of aluminium industry residue materials such as red mud; dross and scrap, etc.; and process modeling for the overall interest of the aluminium industry and the nation as a whole.

Website: www.jnarddc.gov.in

20 Law and Justice

MINISTRY of Law and Justice is the oldest limb of the Government of India dating back to 1833 when the Charter Act,1833 was enacted by the British Parliament. The said Act vested for the first time legislative power in a single authority, namely the Governor General of Council. By virtue of this authority and the authority vested under him under Section 22 of the Indian Councils Act, 1861, the Governor General in Council enacted laws for the country from 1834 to 1920. After the commencement of the Government of India Act, 1919, the legislative power was exercised by the Indian Legislature constituted thereunder. The Government of India Act, 1919 was followed by the Government of India Act, 1935. With the passing of the Indian Independence Act, 1947, India became a Dominion and the Dominion Legislature made laws from 1947 to 1949 under the provisions of Section 100 of the Government of India Act, 1935, as adapted by the India (Provisional Constitution) Order, 1947. Under the Constitution of India which came into force on January 26, 1950, the legislative power is vested in the Parliament.

Website: www.lawmin.gov.in

Ministry of Law and Justice comprises the three Departments namely the Department of Legal Affairs, the Legislative Department and the Department of Justice. The Department of Legal Affairs is assigned legal functions including the interpretation of the Constitution and Laws, litigation, legal profession, law reforms, treaties and agreements with foreign countries in the matters of the civil law, legal services including Indian Legal Service, etc. The Legislative Department is concerned with the drafting of the principal legislation for the central government. The Department of Justice is concerned with the appointment, resignation and the removal of the Chief Justice of India, the judges of the Supreme Court/High Courts etc.

Websites: www.legalaffairs.gov.in

www.doj.gov.in

www.legislative.gov.in

Indian Legal System

The Indian Legal System comprises four components namely the basic values and principles enshrined in the Constitution; rights and obligations conferred by ordinary statues; organisational set-up to enforce these rights and obligations within the Constitutional norms; and lastly the legal and judicial personnel. India being a democratic country and there being a representative democracy there is a chain of accountability towards sovereign which lies amongst the people.

Sources of Law

The main sources of law in India are the Constitution, Statutes (legislation), Customary Law and Case Law. Statutes are enacted by the Parliament, state legislatures and union territory legislatures. Besides, there is a vast body of laws known as subordinate legislation in the form of rules, regulations as well as bye-laws made by central/state governments and local authorities like municipal corporations, municipalities, gram panchayats and other local bodies. This subordinate legislation is made under the authority conferred or delegated either by Parliament or state or union territory legislatures concerned. Judicial decisions of superior courts like Supreme Court and High Courts are important sources of law. Decisions of the Supreme Court are binding in all courts within the territory of India. Local customs and conventions which are not against statute, morality, etc., are also recognised and taken into account by courts while administering justice in certain spheres.

Enactment of Law

The Parliament is competent to make laws on matters enumerated in the Union List. State legislatures are competent to make laws on matters enumerated in the State List. Parliament alone has power to make laws on matters not included in the State List or Concurrent List. On matters enumerated in the Concurrent List, laws can be made by both the Parliament and the state legislature. But in the event of repugnancy, law made by Parliament shall prevail over law made by state legislature, to the extent of repugnancy, be void unless the latter law having been reserved for consideration of President, has received his assent and in that event shall prevail in that state.

Judiciary

At the apex of the entire judicial system exists the Supreme Court of India with a High Court for each state or group of states and under the High Courts there is a hierarchy of subordinate courts. Panchayat Courts also function in some states under various names like Nyaya Panchayat, Panchayat Adalat, Gram Kachehri, etc., to decide civil and criminal disputes of petty and local nature. Different state laws provide for jurisdiction of these courts.

The highest court in each district is that of District and Sessions Judge. This district court is the principal court of civil jurisdiction and can try all offences including those punishable with death. He is the highest judicial authority in a district. Below him, there are courts of civil jurisdiction, known in different states as Munsifs, Sub-Judges, Civil Judges and the like. Similarly, criminal courts comprise Chief Judicial Magistrate and Judicial Magistrate of First and Second class.

Supreme Court

During the British regime, the King in Council, or Privy Council as it was generally called, was the highest forum to entertain appeals from the judgements and orders passed by the courts in India. On enactment of the Judicial Committee Act, 1833, it came to be called the Judicial Committee of Privy Council. The decisions of the Judicial Committee used to be couched in advisory form, though, in practice, the Crown always accepted its advice, and it was unthinkable that its report will not be given effect to. The Privy Council acted as a channel, through which English concepts came to be assimilated with Indian laws. It served as a bridge between the Indian and the English legal system, over which legal ideas travelled from England to India. It was through this body, that the common law of England was introduced in India under the British regime, as the base of its legal system. During its career as the highest court of appeals from India for the period of about 200 years, Privy Council rendered over 2,500 judgements, and till today these judgements constitute the fountain-source of law on many points in India.

However, there was a rising demand for establishment of Supreme Court in India, since it was felt that appeal to the Privy Council was very costly and beyond the means of common man. More important was the

reason that it detracted from the self-respect of the Indian people. Government of India Act, 1935 introduced a federal constitution to India, involving distribution of powers between the centre and the constituent units. The Federal Court of India began functioning from October 1, 1937. To begin with, Federal Court had a very limited jurisdiction, confined to original jurisdiction in disputes between the centre and constituent units or inter se amongst the latter, advisory jurisdiction and appellate jurisdiction on a certificate from the High Court. Appeals from Federal Court could go to the Privy Council, from the judgements rendered in exercise of original jurisdiction, or by leave of the Federal Court or the Privy Council. In cases involving interpretation of the Constitution, the parties had to first go to Federal Court in appeal from the High Court, and in other cases appeals from the High Courts lay directly to the Privy Council. It could give advice on such questions of public importance, as were referred to it by the Governor General, in his discretion. The appellate jurisdiction of the Federal Court was enlarged by enactment of Act No. 1 of 1948 and appeals were provided to Federal Court from the judgement of the High Court in the same circumstances, in which appeals could be brought to the Privy Council, without any special leave and also by special leave of the Federal Court in any other case. However, appeals to the Privy Council were still possible by leave of the Federal Court or of the Council.

After achieving independence in August 1947, there was demand from the Indian polity for enlarging the jurisdiction of Federal Court and granting more powers to it. From 1949, appeals to the Privy Council were abolished altogether and the entire appellate jurisdiction was vested in the Federal Court. On January 26, 1950, Federal Court gave way to the Supreme Court of India under the new Constitution. Supreme Court of India is located on Tilak Marg, New Delhi.

After its inauguration on January 28, 1950, the apex court commenced its sittings in a part of the Parliament House. The Court moved into the present building on August 4, 1958. The original Constitution of 1950 envisaged a Supreme Court with a Chief Justice and 7 puisne Judges - leaving it to Parliament to increase this number. In the early years, all the Judges of the Supreme Court sat together to hear the cases presented before them. As the work of the Court increased and arrears of cases began to cumulate, Parliament increased the number of Judges from 7 in

1950 to 10 in 1956, 13 in 1960, 17 in 1977, 25 in 1986 and 30 in 2009. As the number of the judges has increased, they sit in smaller Benches of two and three—coming together in larger Benches of 5 and more only when required to do so or to settle a difference of opinion or controversy.

The Supreme Court of India comprises the Chief Justice and 30 other Judges appointed by the President of India. Supreme Court Judges retire upon attaining the age of 65 years. In order to be appointed as a Judge of the Supreme Court, a person must be a citizen of India and must have been, for at least five years, a Judge of a High Court or of two or more such Courts in succession; an Advocate of a High Court or of two or more such Courts in succession for at least 10 years; or she/he must be, in the opinion of the President, a distinguished jurist. Provisions exist for the appointment of a Judge of a High Court as an ad hoc Judge of the Supreme Court and for retired Judges of the Supreme Court or High Courts to sit and act as Judges of Supreme Court. The Constitution seeks to ensure the independence of Supreme Court Judges in various ways. A Judge of the Supreme Court cannot be removed from office except by an order of the President passed after an address in each House of Parliament supported by a majority of the total membership of that House and by a majority of not less than two-thirds of members present and voting, and presented to the President in the same Session for such removal on the ground of proved misbehaviour or incapacity. A person who has been a Judge of the Supreme Court is debarred from practising in any court of law or before any other authority in India. The proceedings of the Supreme Court are conducted in English only. Supreme Court Rules, 2013 replacing the 1966 Rules, have been framed under Article 145 of the Constitution to regulate the practice and procedure of the Supreme Court. Justice Sharad Arvind Bobde is the 47th Chief Justice of India. India_2021_DPD: E published on DPD mobile app

Website : www.sci.gov.in

High Courts

High Court stands at the head of the state's judicial administration. There are 24 high courts in the country, three having jurisdiction over more than one state. Among the union territories, Delhi alone has a high court of its own. Other six union territories come under the jurisdiction of different state high courts. Each high court comprises a Chief Justice

and such other judges as the President may, from time to time, appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the State. The procedure for appointing the high court judges is the same except that the recommendation for the appointment of judges in the High Court is initiated by the Chief Justice of the High Court concerned.

They hold office up to 62 years of age. To be eligible for appointment as a judge, one must be a citizen of India and should have held a judicial office in India for 10 years or must have practised as an advocate of a high court or two or more such courts in succession for a similar period.

Jurisdiction and Seat of High Courts

Each high court has powers of superintendence over all courts and tribunals within its jurisdiction. It can call for returns from such courts, make and issue general rules and prescribed forms to regulate their practices and proceedings and determine the manner and form in which book entries and accounts shall be kept. This table gives the seat and territorial jurisdiction of the high courts.

Name of High Courts, their Principal Seats, Benches and their Jurisdiction

Sl No.	High Court	Principal Seat	Jurisdiction	Permanent Bench and Date from which the Bench began fuctioning
1	Allahabad	Prayagraj	Uttar Pradesh	Lucknow (01.07.1948)
2	Andhra Pradesh	Amaravati	Andhra Pradesh	-
3	Bombay	Mumbai	Maharashtra; Goa; Daman and Diu Dadra and Nagar Haveli	Nagpur (01.05.1960) Panaji (01.07.1948) Aurangabad (27.08.1984)
4	Calcutta	Kolkata	West Bengal and Andaman and Nicobar Islands	Circuit Bench Jalpaiguri (yet to begin functioning)
5	Chhattisgarh	Bilaspur	Chhattisgarh	-
6	Delhi	New Delhi	NCT of Delhi	-
7	Gauhati	Guwahati	Assam, Nagaland, Mizoram and Arunachal Pradesh	Kohima (10.02.1990) Aizawl (05.07.1990) Itanagar (12.08.2000)
8	Gujarat	Sola (Ahmedabad)	Gujarat	-
9	Himachal Pradesh	Shimla	Himachal Pradesh	-
10	Jammu and Kashmir	Jammu and Srinagar	Jammu and Kashmir	-
11	Jharkhand	Ranchi	Jharkhand	-
12	Karnataka	Bengaluru	Karnataka	Circuit Benches at Dharwar (07.02.2008) Gulbarga (07.02.2008)
13	Kerala	Kochi	Kerala and Lakshadweep Is.	-
14	Madhya Pradesh	Jabalpur	Madhya Pradesh	Gwalior (01.11.1956) Indore (01.11.1956)

Sl No.	High Court	Principal Seat	Jurisdiction	Permanent Bench and Date from which the Bench began fuctioning
15	Madras	Chennai	Tamil Nadu and Puducherry	Madurai (24.07.2004)
16	Manipur	Imphal	Manipur	-
17	Meghalaya	Shillong	Meghalaya	-
18	Orissa	Cuttack	Odisha	-
19	Patna	Patna	Bihar	-
20	Punjab and Haryana	Chandigarh	Punjab, Haryana and Chandigarh	Chandigarh
21	Rajasthan	Jodhpur	Rajasthan	Jaipur (31.01.1977)
22	Sikkim	Gangtok	Sikkim	-
23	Telangana	Hyderabad	Telangana	Hyderabad (01.01.2019)
24	Tripura	Agartala	Tripura	-
25	Uttarakhand	Nainital	Uttarakhand	Nainital

Approved and Working Strength of Supreme Court and High Courts

Statement showing Sanctioned Strength, Working Strength and Vacancies of Judges in the Supreme Court of India and the High Courts (As on 01.11.2020)

Sl. No.	Name of the Court	Sanctioned Strength			Working Strength			Vacancies as per Approved Strength		
A	Supreme Court of India	34			30			04		
B.	High Court	Pmt.	Addl.	Total	Pmt.	Addl.	Total	Pmt.	Addl.	Total
1	Allahabad	120	40	160	59	41	100	61	-01	60
2	Andhra Pradesh*	28	09	37	20	0	20	08	09	17
3	Bombay	71	23	94	50	15	65	21	08	29
4	Calcutta	54	18	72	33	02	35	21	16	37
5	Chhattisgarh	17	05	22	13	01	14	04	04	08
6	Delhi	45	15	60	31	0	31	14	15	29
7	Gauhati*	18	06	24	14	06	20	04	0	04
8	Gujarat	39	13	52	30	0	30	09	13	22
9	Himachal Pradesh	10	03	13	09	0	09	01	03	04
10	Common High Court for the UTs of J & K and Ladakh	13	04	17	12	0	12	01	04	05
11	Jharkhand	19	06	25	17	0	17	02	06	08
12	Karnataka	47	15	62	26	20	46	21	-05	16
13	Kerala	35	12	47	37	0	37	05	05	10
14	Madhya Pradesh*	40	13	53	30	0	30	10	13	23

Sl. No.	Name of the Court	Sanctioned Strength			Working Strength			Vacancies as per Approved Strength		
15	Madras	56	19	75	53	0	53	03	19	22
16	Manipur	04	01	05	04	01	05	0	0	0
17	Meghalaya	03	01	04	04	0	04	-01	01	0
18	Orissa	20	07	27	16	0	16	04	07	11
19	Patna	40	13	53	22	0	22	18	13	31
20	Punjab & Haryana	64	21	85	42	11	53	22	10	32
21	Rajasthan	38	12	50	24	0	24	14	12	26
22	Sikkim	03	0	03	03	0	03	0	0	0
23	Telengana	18	06	24	13	01	14	05	05	10
24	Tripura	04	0	04	04	0	04	0	0	0
25	Uttarakhand	09	02	11	08	01	09	01	01	02
	Total	815	264	1079	567	106	673	248	158	406

**Acting Chief Justice*

Power of Supreme Court and High Courts

Supreme Court has power to issue any person or authority and government within its jurisdiction, direction, order or writs, including writs which are in the nature of for enforcement of Fundamental Rights and for any other purpose. This power may also be exercised by any high court exercising jurisdiction in relation to territories within which the cause of action, wholly or in part arises for exercise of such power, even if the seat of such government or authority or residence of such person is not within those territories.

Subordinate Courts

The structure and functions of subordinate courts are more or less uniform throughout the country. Designations of courts connote their functions. These courts deal with all disputes of civil or criminal nature as per the powers conferred on them. Subordinate courts follow two important codes prescribing procedures: the Code of Civil Procedure, 1908; and the Code of Criminal Procedure, Cr. P.C., 1973, further strengthened by state level amendments. As per direction of the Supreme

Court in WP (Civil) 1022/1989 in the All India Judges Association case, a uniform designation has been brought about in the subordinate judiciary's judicial officers all over the country, viz., District or Additional District Judge, Civil Judge (Senior Division) and Civil Judge (Junior Division) on the civil side; and on criminal side, Sessions Judge, Additional Sessions Judge, Chief Judicial Magistrate and Judicial Magistrate, etc., as laid down in the Cr.P.C. Appropriate adjustment, if any, has been made in existing posts by indicating their equivalent with any of these categories by all state governments/UT administrations. Under Article 235 of the Constitution of India, the administrative control over the members of subordinate judicial service vests with the concerned high court. Further, in the exercise of powers conferred under provision to Article 309 read with Articles 233 and 234 of the Constitution, the state government shall frame rules and regulations in consultation with the high court exercising jurisdiction in relation to such state. The members of the State Judicial Services are governed by these rules and regulations.

National Mission for Justice Delivery and Legal Reforms

National Mission for Justice Delivery and Legal Reforms was set up in 2011 with the twin objectives of increasing access by reducing delays and arrears in the system and enhancing accountability through structural changes and by setting performance standards and capacities. The Mission has been pursuing a co-ordinated approach for phased liquidation of arrears and pendency in judicial administration, which, interalia, involves better infrastructure for courts including computerisation; increase in strength of subordinate judiciary; policy and legislative measures in the areas prone to excessive litigation; re-engineering of court procedure for quick disposal of cases; and emphasis on human resource development. The Mission has taken several steps in each of the strategic areas towards fulfilment of its objectives. All states have formulated their Litigation Policies with a view to reduce the governmental litigation. State governments have been requested to make an assessment of the impact of the State Litigation Policies on controlling proliferation of litigation by state agencies. Department of Legal Affairs has formulated National Litigation Policy, 2015, which is under active consideration of the government.

Lack of adequate number of judges to handle the large number of cases pending in courts is often cited to be one of the main reasons for delays. The problem of shortage of judges is being addressed through a two-pronged strategy. Firstly, by filling up the large number of existing vacancies in the judiciary and secondly, increasing the sanctioned strength of judges. It would be pertinent to note that as per the constitutional framework, the selection and appointment of judges in subordinate courts are the responsibilities of state governments and high courts.

In the case of Imtiyaz Ahmed versus State of Uttar Pradesh and others, the Supreme Court asked the Law Commission of India to evolve a method for scientific assessment of the number of additional courts to clear the backlog of cases. The criteria of judge-population ratio for determining the adequacy of the Judge Strength in the country has been reviewed by the Law Commission in its 245th Report (2014) prepared on the direction of the Supreme Court in this case. In this report, the Law Commission has observed that filing of cases per capita varies substantially across geographic units as filings are associated with economic and social conditions of the population. As such, the Law Commission did not consider the judge-population ratio to be a scientific criterion for determining the adequacy of the judge strength in the country. The Law Commission found that in the absence of complete and scientific approach to data collection across various High Courts in the country, the Rate of Disposal method to calculate the number of additional judges required to clear the backlog of cases as well as to ensure that new backlog is not created, is more pragmatic and useful. In May 2014, the Supreme Court asked the state governments and the high courts to file their response to the recommendations made by the Law Commission. In August 2014, the Supreme Court asked the National Court Management System Committee (NCMS) to examine the recommendations made by the Law Commission and to furnish their recommendations in this regard. NCMS submitted its report to the Supreme Court in March 2016. It has, interalia, observed that in the long term, the judge strength of the subordinate courts will have to be assessed by a scientific method to determine the total number of judicial hours required for disposing of the case load of each court. In the interim, this

Committee has proposed a "weighted" disposal approach— disposal weighted by the nature and complexity of cases in local conditions.

On account of the concerted efforts made by all stakeholders, there has been a gradual increase in the sanctioned strength of the subordinate judiciary over the past few years. It has increased from 17,715 at the end of 2012 to 22,619 by December 2017. In case of the high courts, the Chief Justice of India gave an in principle concurrence in April 2014 to the joint recommendation of the Chief Ministers and Chief Justices Conference held in April 2013, to increase the sanctioned strength of high courts by 25 per cent. Several states have already accepted this proposal, as a result of which the sanctioned strength of high courts has increased from 906 judges in 2014 to 1,079 judges in December 2017. The judge-population ratio in the country, taking into account sanctioned strength of judges at all levels now stands at about 19.61 judges per one million of the population. However, it is noted that despite the gradual increase in the sanctioned strength, there still remain a large number of vacancies in subordinate courts.

Judicial Infrastructure

The primary responsibility of infrastructure development for the subordinate judiciary rests with the state governments. A centrally sponsored scheme has been in place since 1993-94 to assist the states for the development of judicial infrastructure. It covers the construction of court buildings and residential accommodation of judicial officers. Until 2011, the central and state governments used to contribute an equal share under the scheme but from 2011-12 onwards the central government was contributing 75 per cent of the funds. In the case of north-eastern states, the central government provides 90 per cent of the funding. Central funding is, however, subject to budgetary allocation for the scheme.

e-Courts Integrated Mission Mode Project

The e-Courts Integrated Mission Mode Project is one of the e-Governance projects being implemented in High Courts and district/subordinate courts of the country. The project has been conceptualised on the basis of the "National Policy and Action Plan for Implementation of Information and Communication Technology in the Indian Judiciary-2005" by the e-Committee of the Supreme Court of India. The e-Committee was formed in 2004 to draw up an action plan for

the ICT enablement of the Judiciary with the Patron in Chief-cum-Adhoc Chairman as the Chief Justice of India.

Access to Justice for the Marginalised

In partnership with the United Nations Development Programme (UNDP), the Department of Justice (DoJ), Ministry of Law and Justice, is implementing a decade-long programme on Access to Justice for Marginalised People (2008-2017). The project extends to the eight UNDAF states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra and Odisha. This project focuses on strengthening access to justice for the marginalised people by developing strategies that address barriers to accessing justice in legal, social and economic domains. The project is presently in the second phase of implementation.

Legal Affairs

Department of Legal Affairs is the nodal department for reciprocal arrangement with foreign countries for enforcement of arbitral awards pursuant to the New York Convention under Section 44(b) of the Arbitration and Concilliation Act, 1996. The Department of Legal Affairs is the Central Authority under the Hague Convention of 1965 for service aboard of judicial and extra-judicial documents in civil and commercial matters. Under this obligation, around 9,309 requests have been processed since May 2014 till May 2017.

Legal Information Management and Briefing System

In line with Digital India Mission, this system digitalises the court case details and brings various stakeholders on a single platform. LIMBS helps to introduce transparency as well as a sense of ownership among various stakeholders during the entire lifecycle of a court case. In a very short span, with the help of various ministries and their nodal officers and local adminstration, LIMBS has captured more than 1.36 lakh court cases with more than 5,500 registered users, more than 14,000 advocates, and 1,200 courts. Number of Arbitration cases on the portal is 452. More than 200 presentations have been made for concerned officers of the 62 ministries/departments.

Way Forward

Department of Legal Affairs has identified some focus areas to encourage the principles of transparency, objectivity and accountability in its dealings with the public in conformity, interalia, with the objective of good governance; minimum government; maximum governance and ease of doing business; and reducing litigation within the framework and mandate assigned to it. Because of the welfare nature, the size of the government is enormous. New laws and tools are being evolved to meet new situations arising due to growth, development, science and technology, increase in population, paraphernalia and consciousness amongst people about their rights. In this context, the following major initiatives/ reforms are proposed for vision New lndia-2022:

Litigation Assessment

The Department has taken preliminary steps to formulate litigation assessment/legal audit/guidelines to examine a case during its journey arising from a dispute to a full-blown litigation and its outcome and subsequent implementation aspect or otherwise. If the litigation assessment is carried out at the stage of policy formulation, it would have the following results: (i) a holistic picture will emerge in the proposal; (ii) may prevent litigation to crop up; (iii) will bring down case load on the judicial system and; (iv) reduce consequent burden on the public exchequer.

National Litigation Policy

There are approximately 3.2 crore cases pending in various courts in India. Government is said to be the major litigant and there have been several Law Commission reports suggesting for a Litigation Policy to avoid unwarranted litigation by the government and thus bring down load on the court system as well as burden on the public exchequer. Therefore, the draft National Litigation Policy 2017, proposes to put in place a system which prevents, controls and reduces litigation.

Institutionalisation of Arbitration

Delay in conducting legal procedures and want of timely disposal of investment related cases/application lead to international arbitration involving huge expenditure to the state exchequer. Hence, streamlining the legal and judicial systems to ensure speedy resolution of commercial disputes is the need and a necessary requirement. Department of Legal Affairs, constituted a high-level committee to review Institutionalisation

of Arbitration Mechanism in India, under the chairmanship of Hon'ble Justice Shri B. N. Srikrishna. The report of this Committee has been submitted to the Minister for Law and Justice in July 201 7.

Reforms in Legal Profession

Legal fraternity represents the most enlightened and traditionally respected section of the society. In a democratic polity, the role of this dignified profession has always been very important. It is the watchdog of democracy and remains ever vigilant in the matters concerning the rule of law as enshrined and guaranteed by our Constitution. There has been a strong objection on the matter of allowing legal practice in India by foreign lawyers and law firms, interalia, on the ground of procedural hurdles faced by Indian Lawyers in case they want to practice in foreign countries. Therefore, the issue is of parity in opportunity to practice on reciprocal basis.

Appellate Tribunal for Foreign Exchange

The Appellate Tribunal for Foreign Exchange was established in 2000 under Section 18 of Foreign Exchange Management Act (FEMA), 1999. Under Section 19 of FEMA, the central government or any person aggrieved by an order made by Special Director (Appeals), or made by an Adjudicating Authority other than referred to in Sub-Section (i) of Section 1 7, may prefer an appeal to the Appellate Tribunal that may be filed within 45 days from the date of receiving the order by the aggrieved person or the central government.

Section 20 of FEMA provides that the Appellate Tribunal shall consist of a Chairperson and such number of members as the central government may deem fit. The jurisdiction of the Appellate Tribunal may be exercised by the Benches. The Bench may be constituted by the Chairperson, with one or more Members as the Chairperson deems fit. The Benches of the Appellate Tribunal shall ordinarily sit in New Delhi and at such other places as the central government may, in consultation with the Chairperson, notify and the Chairperson may transfer a Member from one Bench to another. If at any stage it appears that the matter should be heard by a Bench of two Members, the Chairperson may transfer the matter to such Bench as he deems fit. A person who is qualified to be a Judge of a High Court or is or has been one can be appointed as Chairperson of the Tribunal and a person who has been or is

qualified to be a District Judge can be appointed as a Member of the Tribunal. Under Section 49 Sub-section (5) clause (b), all appeals which were pending before PERA Board have been transferred and are at the disposal of the Appellate Tribunal constituted under Foreign Exchange Management Act.

Enforcement Agencies

Police

The police force in the country is entrusted with the responsibility of maintenance of public order and prevention and detection of crimes. Public order and police being state subjects under the Constitution, police is maintained and controlled by states. The police force in a state is headed by the Director General of Police/ Inspector General of Police. State is divided into convenient territorial divisions called ranges and each police range is under the administrative control of a Deputy Inspector General of Police. A number of districts constitute the range. District police is further sub-divided into police divisions, circles and police stations. Besides the civil police, states also maintain their own armed police and have separate intelligence branches, crime branches, etc. Police set up in big cities like Delhi, Kolkata, Mumbai, Chennai, Bengaluru, Hyderabad, Ahmedabad, Nagpur, Pune, etc., is directly under a Commissioner of Police who enjoys magisterial powers. All senior police posts in various states are manned by the Indian Police Service (IPS) cadres, recruitment to which is made on All-India basis.

The central government maintains Central Police forces, Intelligence Bureau (IB), Central Bureau of Investigation (CBI), institutions for training of police officers and forensic science institutions to assist the states in gathering intelligence, in maintaining law and order, in investigating special crime cases and in providing training to the senior police officers of the state governments.

Indo-Tibetan Border Police

The Indo-Tibetan Border Police (ITBP) was raised in the wake of Chinese aggression in 1962 under an integrated ‘guerilla-cum-intelligence-cum-fighting Force’, self-contained in supplies, communication and intelligence collection. It has evolved with passage of time into a conventional border guarding Force. Today, ITBPF guards

3,488 kms of Indo-China Border and is manning 173 Border Out Posts (BOPs) with altitudes ranging from 9,000 feet to 18,750 feet in the western, middle and eastern sector of the Indo-China Border along the Himalayas from Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh. 8 ITBPF Bns are deployed in Maoist affected areas of Chhattisgarh. The Force operates through 5 frontier headquarters, 14 sector headquarters, 56 service battalions, 2 DM battalions, 4 specialised battalions and 14 training centres with a total sanctioned strength of 89,432.

ITBP is basically a mountain trained force and most of the officers and men are professionally trained mountaineers and skiers. They have scaled more than 180 Himalayan peaks including Mt. Everest four times including the 2012 expedition. ITBP mountaineers have also successfully climbed peaks in Nepal, Iran, Japan and South America. ITBP skiers have been national champions and have taken part in winter Olympics. They have also participated in adventurous White Water Rafting, through turbulent and mighty waters of the Brahmaputra, the Indus and the Ganges and also have international achievements to their credit in this field.

Website : www.itbpolice.nic.in

Border Security Force

International borders of India with Pakistan both east and west were being manned by the respective state police forces till Indo-Pak war in September 1965. Certain inherent shortcomings of this arrangement came to light during the war and it was decided to have one single force under the Union of India for guarding the international borders with Pakistan.

Border Security Force was raised in 1965 with the strength of 25 Battalions and 3 Coys. Over the years, the Force has grown in size and as on date, it has 186 Battalions including 3 NDRF battalions, 5 major training institutions, 11 subsidiary training centres and 3 minor training institutions. The Force Headquarter is in New Delhi. Its field formations includes 2 Special Directorates General (Spl DsG), i.e., Spl DG (Eastern Command) and Spl DG (Western Command), 13 Frontiers and 46 sector headquarters, water wing, air wing and other ancillary units. The sanctioned strength of BSF as on December 31, 2019 is 2,65,173.

BSF's role during peace time is as follows : (i) to promote a sense of security among the people living in the border areas; (ii) to prevent trans-border crimes, unauthorised entry into or exit from the territory of India; (iii) to prevent smuggling and any other illegal activities on the border; (iv) anti-infiltraton duties; and (v) to collect trans-border intelligence. Its role during war time is as follows: (i) holding ground in assigned sectors; limited aggressive action against central armed police or irregular forces of the enemy; (iii) maintenance of law and order in enemy territory administered under the army's control; (iv) guarding of prisoners of war camps; (v) acting as guides to the army in border areas; (vi) assistance in control of refugees; (vii) provision of sectors; and (viii) performing special tasks connected with intelligence including raids.

Website: www.bsf.gov.in

Assam Rifles

The Assam Rifles raised as Catchar Levy in 1835 is the oldest Central Para Military Force in India. The Force was raised primarily to guard the alluvial plains of Assam from the wild and unruly tribes inhabiting the surrounding hill tracts. This was the earliest embodied unit of what eventually developed into the Assam Rifles. Gradually, more such units were raised and employed for establishing posts in the interior and thus acted as the strong arm of the civil administration in extending the authority of the Britishers. The Force also helped in opening up these inaccessible and isolated areas; and in undertaking development activities, earning many accolades from the administration. The Assam Rifles' contribution towards assimilation of the people of the north-east into the national mainstream is truly monumental. Their long association with the region reflects in the force being fondly called "The Sentinel of the North-East" and "Friends of the Hill People" security in the north-eastern region and guarding the Indo-Myanmar border.

It has its headquarters at Shillong and the Force is completely deployed in the North East for guarding the Indo-Myanmar Border, spread over 1,631 kilometers. It functions under the control of Ministry of Home Affairs. The Force comprises a Directorate General headquarter, three Inspectorate General headquarters, 12 sector headquarters, 46 battalions, one training centre and the administrative elements with a total strength of 63,747 personnel.

Website : www.assamrifles.gov.in

National Security Guard

Terrorism, both national and international, raised its head in the west during the seventies. It manifested in many forms including hijacking of aircraft, taking of hostages, assassination of dignitaries and others. The normal law and order machinery and the defence forces of the West were found wanting to deal with this menace. Specially equipped and trained forces like SAS of UK, Delta Force of USA and GSG-9 of West Germany were raised abroad. The need for creating a special force for executing surgical operations based on tactical intelligence was felt in India when Operation Blue Star was carried out by the army at the Golden Temple, Amritsar in 1984. National Security Guard (NSG) was conceptualised and created after studying and analysing Special Force like SAS in the United Kingdom, GIGN in France, GSG-9 in Germany, Shar-et-matkal in Israel and Delta Force in the USA. Accordingly, NSG was raised in October 1985, as a Federal Contingency Force under the MHA. It consists of selected and highly motivated personnel from the army as well as the central armed police. About 53 per cent of the personnel are drawn from the army while the central armed police like BSF, CRPF and ITBP contribute 47 per cent. NSG has a glorious heritage and is held in high esteem by the nation. Since raising, its commandos have been employed in 114 major successful counter terrorist operations, earning numerous awards and rewards including three Ashok Chakras, two Kirti Chakras, three Shaurya Chakras and 10 PPMG. Nine NSG Commandos have also made the supreme sacrifice in living up to the NSG's motto of Sarvatra Sarvottam Suraksha.

Website: www.nsg.gov.in

Central Reserve Police Force

The Central Reserve Police Force (CRPF) was formed in July 1939 at Neemuch as the Crown Representative's Police. After independence, it was renamed as the Central Reserve Police Force and Sardar Vallabh Bhai Patel, the then Home Minister, had visualised a multi-dimensional role for it. The CRPF has innumerable achievements to its credit. It was the CRPF which bore the brunt of the first onslaught of the Chinese aggression at Hot Springs in Ladakh in 1959 when a small CRPF patrol was ambushed and heavily out-numbered by the Chinese army. In the

ensuing battle, 10 CRPF men laid down their lives. Every year 21st October is observed as the Police Commemoration Day. The force proved its mettle in 1965 when a small contingent of Second Bn CRPF, successfully fought and repulsed an attack by a Pakistani Brigade on 9th April at Sardar Post in Gujarat, killing 34 Pakistani soldiers and capturing 4 alive. Never in the history of military battles have a handful policemen fought back a full-fledged infantry brigade in such a manner. In this incident six valiant CRPF men also laid down their lives. As a tribute to the saga of our brave men, 9th April is now befittingly celebrated as "Valour Day" in the Force.

The CRPF has also been deployed internationally at Kosovo, Haiti and Sri Lanka. In Sri Lanka, two CRPF Battalions and one company of Mahila Battalion were a part of the Indian Peace Keeping Force. The first major offensive of the LTTE directed against the CRPF, using unconventional warfare was successfully repelled. Now, for the first time in the history of UN, a fully formed women's unit is posted in Liberia as a part of United Nations Peacekeeping Mission. On December 13, 2001, when the terrorists attacked the Parliament House it was the brave CRPF who successfully foiled the attack. In exchange of fire, all the five militants were eliminated. Mahila Ct Kamlesh Kumari who sacrificed her life during the incident was, for her exemplary bravery, awarded the highest peacetime Gallantry Award 'Ashok Chakra' posthumously. When 5 armed terrorists tried to storm the Ram Janambhoomi/Babri Masjid Complex in Ayodhya in July 2005, and had penetrated the outer security rings, they were confronted by the CRPF posted at the inner security ring. The CRPF Jawans fought bravely and thwarted the evil designs of the terrorists and successfully eliminated all of them on the spot.

From a single battalion in 1939 the Force has now grown to four zones; 20 Adm. Sectors; 2 Ops Sectors; 36 Adm Ranges; 7 Ops Ranges; 228 Bns; 41 group centers; 15 training institutions and 4 composite hospitals. It is the only Central Armed Police Force in the country which has 3 Mahila Battalions. The bulk of the Force is deployed in Jammu and Kashmir; left wing extremism affected states and in north-eastern states to tackle terrorist and insurgent activities. It presently has 10 Cobra units, a specially trained force to fight the naxal means. The Cobra battalions have been deployed strategically in the naxal affected areas. CRPF has

always been playing a significant role in times of natural disasters. When the destructive Tsunami had caused an unprecedented damage to lives and property or when the Jammu and Kashmir earthquake had devastated large areas disrupting life on a massive scale, CRPF played a significant role in the relief, rescue and rehabilitation efforts. We now have two battalions of CRPF designated as Disaster Management battalions and they have been located in Pune and Ahmedabad.

Website: www.crpf.gov.in

Rapid Action Force

In 1992, 10 Battalions of CRPF were reorganised and converted into 10 battalions of 4 Coys each of Rapid Action Force (RAF). The personnel in RAF are trained and equipped to be an effective strike Force in communal riots and similar situations. These Battalions are located at 10 communally sensitive locations across the country to facilitate quick response in case of any such incident. All these Battalions are organised on an unattached pattern and are working under the supervision of an Inspector General.

Commando Battalion for Resolute Action

In order to effectively tackle the Maoists, the need for a Special Force, capable of striking at the core of naxal heartland was felt. With this idea, ten CoBRA (Commando Battalion for Resolute Action) battalions were raised between 2008 and 2011. The selected personnel are put through specialised training regimen to prepare physically and mentally to survive the rigours of the treacherous and inhospitable terrains and fight the guerillas like the guerillas. Out of the ten CoBRA battalions, nine are deployed in LWE (Left Wing Extremism, i.e., Maoists infested areas) and one in Assam.

Central Industrial Security Force

Raised in 1969, Central Industrial Security Force (CISF) is providing security cover to 303 units including 59 domestic and international airports and fire protection cover to 87 industrial undertakings. With globalisation and liberalisation of the economy, CISF is no longer a PSU-centric organisation. Instead, it has become a premier multi-skilled security agency of the country, mandated to provide security to major critical infrastructure installations of the country in diverse regions

including terrorist and naxal affected areas. CISF is currently providing security cover to 308 units which include atomic power plants, space installations, defence production units, mines, oil fields and refineries, major sea ports, heavy engineering steel plants, fertiliser units, airports, hydro electric/ thermal power plants, sensitive government buildings and even heritage monuments (including the Taj Mahal and Red Fort), including iconic private sector units. The Force is also one of the largest fire protection service providers in the country. It provides fire protection cover to 86 industrial undertakings. CISF has been inducted into Ratnagiri Gas and Thermal Power Station Ltd., Rajiv Gandhi Thermal Power Project, Hissar, Haryana. The specialised task of airport security was assigned to CISF in the wake of hijacking of Indian Airlines plane to Kandhar.

The Force has so far taken over security of all major airports in the country, which includes international airports of Mumbai, Delhi, Chennai and Kolkata. Besides, it has taken over security of 45 government buildings, which include North Block, part of South Block and CGO Complex in Delhi. CISF Act was amended to enable the force to provide security, on payment basis, to private/ joint venture industrial undertakings, which are vital for the security and economy of the country. After the Mumbai terrorist attack in November 2008, the mandate of the force has been broadened to provide direct security cover to private sector also. More than 175 private sector installations have already requested for CISF protection and Infosys Technologies Limited - a multinational information technology services company's headquarter in Bengaluru - became the first private sector company to get the CISF security cover in August 2009. CISF is a cost reimbursement force, i.e., it is not a burden on the national exchequer. CISF in October 2009, started a passenger-friendly utility on its official website www.cisf.gov.in for the lost and found articles at all airports where CISF has been deployed.

Website: www.cisf.gov.in

Sashastra Seema Bal

The "Sashastra Seema Bal" (SSB) is the newest border guarding force of Union of India entrusted with the guarding of Indo-Nepal and Indo-Bhutan borders. "Sashastra Seema Bal" is guarding Indo-Nepal border since 2001 and was also given the additional responsibility of guarding

Indo-Bhutan border in 2004. Sashastra Seema Bal came into existence under the name Special Service Bureau in early 1963 in the wake of Indo-China conflict. Its earlier aim was to build people's morale and inculcate a spirit of resistance in border population in the then NEFA, North Assam, North Bengal, hills of Uttar Pradesh, Himachal Pradesh and Jammu and Kashmir (Ladakh). The area of operation was extended to other border areas in Manipur, Tripura, Jammu, Meghalaya, Sikkim, Rajasthan, Gujarat, Mizoram, South Bengal and Nagaland between 1965-91.

The role of SSB in earlier se-tup includes : (i) to inculcate a sense of security and spirit of resistance in border population; (ii) promoting national awareness and security consciousness; and (iii) organising and preparing border population to resist enemy.

Website: www.ssb.nic.in

Civil Defence

Civil Defence includes any measures not amounting to actual combat, for affording protection to any person, property, place or thing in India or any part of the territory thereof against any hostile attack whether from air, land, sea or other places or for depriving any such attack of the whole or part of its effect, whether such measures are taken before, during or after the time of such attack, or any measures taken for the purpose of disaster management, before, during, or after any disaster.

Civil Defence volunteers are in various constructive and nation building activities—including providing assistance to the administration in undertaking social and welfare services and in the prevention, mitigation of natural, man-made disasters as well as in post-disaster response and relief operations and law and order situations. The training of its organisation is carried out in three-tier levels. The training of master trainers and specialised training is conducted at the National Civil Defence Col lege, Nagpur, and team/leadership training is conducted at state civil defence institutes. Training of the volunteers in Civil Defence Organisation is conducted at local/town levels by trained trainers in the form of short-term training programmes.

The Civil Defence Act, 1968, was suitably amended by the Civil Defence (Amendment) Act, 2009 in 2010, to include the disaster

management as an additional role for the Civil Defence Corps, while retaining its primary role. The additional role in disaster management will be enacted by the Civil Defence Personnel before, during and after emergencies arising out of calamities/disasters, whether natural or man-made. Although the Civil Defence Act, 1968, is applicable throughout the country, the organisation is only raised in such areas and zones which are tactically and strategically considered vulnerable from enemy attack point of view. Civil Defence towns have been converted into districts and categorisation of the districts in respect of state/union territory is appended herewith 100 Multi Hazard Prone Districts. Civil Defence activities are restricted to 259 categorised towns spread over 26 states/union territories.

The objectives of Civil Defence are to save the life, to minimise loss of property, to maintain continuity of production and to keep high the morale of the people. During times of war and emergencies, it has the vital role of guarding the hinterland, supporting the armed forces, mobilising the citizens and helping civil administration. The concept of Civil Defence over the years has shifted from management of damage against conventional weapons to also include threat perceptions against nuclear weapons, biological and chemical warfare and natural and man-made disasters. Civil Defence is primarily organised on voluntary basis except for a small nucleus of paid staff and establishment which is augmented during emergencies. The present target of Civil Defence volunteers is 14.11 lakhs, out of which 5.38 lakhs have already been raised. However, duty/training allowance is admissible to such volunteers. These volunteers are administered and trained by deputy controllers and medical officers.

To help the state governments, the central government reimburses 50 per cent of the expenditure incurred by the state government on the authorised items of Civil Defence for raising, training and equipping of Civil Defence Services, etc., for the north-eastern states excluding Assam and 25 per cent for other states including Assam in the form of grants-in-aid, some part of the expenditure incurred on the authorised items of Civil Defence for raising, training and equipping for Civil Defence. Every year, these grants-in-aid are released in the form of reimbursement share of expenditure claims submitted by the states. Apart from carrying out training and rehearsal/demonstration of Civil Defence measures

during peace time, such volunteers are also deployed on a voluntary basis, in various constructive and nation building activities, which include providing assistance to the administration in undertaking social and welfare services and in the prevention/ mitigation of natural/man-made disasters as well as in post-disaster responses and relief operations.

Home Guards

Home Guards is a voluntary force, first raised in India in December 1946, to assist the police in controlling civil disturbances and communal riots. Subsequently, the concept of the voluntary citizens force was adopted by several states. In the wake of Chinese aggression in 1962, the centre advised the states and union territories to merge their existing voluntary organisations into one uniform voluntary force known as Home Guards. The role of Home Guards is to serve as an auxiliary to the police in maintenance of internal security, help the community in any kind of emergency such as an air-raid, fire, cyclone, earthquake, epidemic, etc.; help in maintenance of essential services; promote communal harmony and assist the administration in protecting weaker sections; participate in socio-economic and welfare activities and perform civil defence duties. Home Guards are of two types—rural and urban. In border states, Border Wing Home Guard Battalions have also been raised, which serve as an auxiliary to the Border Security Force. The organisation is spread over in all the states and union territories except in Kerala. In seven border states, a total of eighteen (18) Border Wing Home Guards (BWHG) Battalions have also been raised, viz., Punjab (6 Bns), Rajasthan (4 Bns), Gujarat (4 Bns) and one each of Bns for Assam, Meghalaya, Tripura and West Bengal to serve as an auxiliary to Border Security Force for preventing infiltration on the international border/coastal areas, guarding of WIPs and lines of communication in vulnerable areas at the time of external aggression.

Home Guards are raised under the Home Guards Act and rules of the states/ union territories. They are recruited from various cross-sections of the people such as doctors, engineers, lawyers, private sector organisations, college and university students, agricultural and industrial workers, etc., who give their spare time to the organisation for betterment of the community. All citizens of India, who are in the age group of 18-50, are eligible to become members of Home Guards. Normal tenure of

membership in Home Guards is 3 to 5 years. Home Guard personnel are also awarded President's Medal for gallantry, distinguished and meritorious services. A Home Guard, whenever called out for duty/training, is paid duty/training allowance at prescribed rates to meet out-of-pocket expenses. Members of Home Guards in the organisation are trained to assist police in maintenance of law and order; prevention of crime; anti-dacoity measures; border patrolling; prohibition; flood relief; fire-fighting; election duties; and social welfare activities. In the event of national emergency, some portion of Civil Defence work is also entrusted to the Home Guards. The Ministry of Home Affairs formulates the policy in respect of role, target, raising, training, equipping, establishment and other important matters of Home Guards Organisation. Expenditure on Home Guards is generally shared between centre and state governments as per existing financial policy.

Fire Services

"Fire Services" is a state subject and has been included as a municipal function in the XII schedule of the Constitution of India in terms of Article 243-W. As such, it is the primary responsibility of the state governments/municipal bodies to enforce the National Building Code and allocate sufficient resources for strengthening and equipping Fire Services to ensure safety of life and property of citizens within their jurisdiction. The 13th Finance Commission recognising the need to restructure Fire and Emergency Services across the country has recommended that a portion of the grants provided to the urban local bodies should be spent on revamping of fire services within their respective jurisdiction. Further, the Finance Commission has also recommended that all municipal corporations with a population of more than 1 million (2001 census) must put in place a fire hazard response and mitigation plan for their respective areas. Government of India as a supplemental initiative is also implementing a centrally sponsored scheme at a cost of ₹ 200 crores for strengthening of Fire and Emergency Services in the country. The Scheme attempts to fill the existing gaps in firefighting and rescue capabilities through introduction of modern technology such as advanced fire tender, high pressure pump with mist technology, quick response team vehicle, combi tools for search and rescue and capacity building of various stakeholders.

Personal Law

The people of India are of different religions and faiths. They are governed by different sets of personal laws in respect of matters relating to family affairs, i.e., marriage, divorce, succession, adoption, wills, etc. The subject matter of personal laws is relatable to entry 5 of List III-Concurrent list in the Seventh Schedule to the Constitution of India and hence the Union Legislature, namely, the Parliament and subject to the provisions of Article 254 of the Constitution. The state legislatures are also competent to make laws in the field.

Marriage

Law relating to marriage and divorce has been codified in different enactments applicable to people of different religions. These are: (i) The Converts Marriage Dissolution Act, 1866; (ii) The Divorce Act, 1869; (iii) The Indian Christian Marriage Act, 1872; (iv) The Kazis Act, 1880; (v) The Anand Marriage Act, 1909; (vi) The Indian Succession Act, 1925; (vii) The Parsi Marriage and Divorce Act, 1936; (viii) The Dissolution of Muslim Marriage Act, 1939; (ix) The Special Marriage Act, 1954; (x) The Hindu Marriage Act, 1955; (xi) The Foreign Marriage Act, 1969; and (xii) The Muslim Women (Protection of Rights on Divorce) Act, 1986.

The Special Marriage Act, 1954, which provides for a special form of marriage and the registration of such marriages extends to the whole of India except the former state of Jammu and Kashmir, but also applies to the citizens of India domiciled in Jammu and Kashmir. Persons governed by this Act can specifically register marriage under the said Act even though they are of different religious faiths. The Act also provides that the marriage celebrated under any other form can also be registered under The Special Marriage Act, if it satisfies the requirements of the Act. The Section 4(b) (iii) of the Act, was amended to omit the words “or epilepsy”. Sections 36 and 38 have been amended to provide that an application for alimony or the maintenance and education of minor children be disposed off within 60 days from the date of service of notice on the respondent. An attempt has been made to codify customary law which is prevalent among Hindus by enacting the Hindu Marriage Act, 1955. This Act, which extends to the whole of India, except the former state of Jammu and Kashmir, applies also to Hindus domiciled in

territories to which the Act extends and those who are outside the said territories. It applies to Hindus (in any of its forms or development) and also to Buddhists, Sikhs, Jains and also those who are not Muslims, Christians, Parsis or Jews by religion. However, the Act does not apply to members of any scheduled tribes unless the central government by notification in the official Gazette otherwise directs. Provisions as regard to divorce are contained in Section 13 of The Hindu Marriage Act and Section 27 of The Special Marriage Act. Common ground on which divorce can be sought by a husband or a wife under these Acts are: adultery, desertion, cruelty, unsoundness of mind, venereal disease, leprosy, mutual consent and being not heard of as alive for seven years.

As regards the Christians, provisions relating to marriage and divorce are contained in The Indian Christian Marriage Act, 1872, and in Section 10 of The Indian Divorce Act, 1869 respectively. Under that Section the husband can seek divorce on grounds of adultery on the part of his wife and the wife can seek divorce on the ground that the husband has converted to another religion and has gone through marriage with another woman or has been guilty of: (a) incestuous adultery; (b) bigamy with adultery; (c) marriage with another woman with adultery; (d) rape, sodomy or bestiality; (e) adultery coupled with such cruelty as without adultery would have entitled her to a divorce (a system of divorce created by the Roman Catholic Church equivalent to judicial separation on grounds of adultery, perverse practices, cruelty); and (f) adultery coupled with desertion without reasonable excuse for two years or more.

In The Divorce Act, 1869, comprehensive amendments were made through The Indian Divorce (Amendment) Act, 2001, to remove discriminatory provisions against women in the matter of divorce and to provide for dissolution of marriage by mutual consent. Further, Section 41 of the 1869 Act was amended by The Marriage Laws (Amendment) Act, 2001, to provide that an application for alimony or the maintenance and education of minor children be disposed off within 60 days from the date of service of notice on the respondent. As regards Muslims, marriages are governed by the Mohammedan Law prevalent in the country. As regards divorce, i.e., a Muslim wife has a much restricted right to dissolve her marriage. Unwritten and traditional law tried to ameliorate her position by permitting her to seek dissolution under the following forms: (a) This is a form of delegated divorce. According to

this the husband delegates his right to divorce in a marriage contract which may stipulate, on his taking another wife, the first wife has a right to divorce him; (b) this is a dissolution of agreement between the parties to marriage on the wife's giving some consideration to the husband for her release from marriage ties. Terms are a matter of bargain and usually take the form of the wife giving up her or a portion of it; and (c) this is divorce by mutual consent.

Further, by The Dissolution of Muslim Marriage Act, 1939, a Muslim wife has been given the right to seek dissolution of her marriage on these grounds: (i) whereabouts of the husband have not been known for a period of four years; (ii) husband is not maintaining her for a period of two years; (iii) imprisonment of husband for a period of seven years or more; (iv) failure on the part of husband to perform his marital obligations, without a reasonable cause, for a period of three years; (v) impotency of husband; (vi) two-year long insanity; (vii) suffering from leprosy or virulent venereal disease; (viii) marriage took place before she attained the age of 15 years and not consummated; and (ix) cruelty.

The Parsi Marriage and Divorce Act, 1936, governs the matrimonial relations of Parsis. The word 'Parsi' is defined in the Act as a Parsi Zoroastrian. AZoroastrian is a person who professes the Zoroastrian religion. It has a racial significance. Every marriage as well as divorce under this Act is required to be registered in accordance with the procedure prescribed in the Act. The provisions of the Parsi Marriage and Divorce Act, 1936, have been enlarged so as to bring them in line with The Hindu Marriage Act, 1955. Sections 39 and 49 of The Parsi Marriage and Divorce Act, 1936, were amended by The Marriage Laws (Amendment) and education of minor children be disposed off within 60 days from the date of service of notice on the wife or the husband as the case may be. As for the matrimonial laws of Jews, there is no codified law in India. Even today, they are governed by their religious laws. Jews do not regard marriage as a civil contract, but as a relation between two persons involving very sacred duties. Marriage can be dissolved through courts on grounds of adultery or cruelty. Marriages are monogamous.

Adoption

Although there is no general law governing adoption, it is permitted by The Hindu Adoption and Maintenance Act, 1956, amongst Hindus and

by custom amongst a few numerically insignificant categories of persons. Since adoption is legal affiliation of a child, it forms the subject matter of personal law. Muslims, Christians and Parsis have no adoption laws and have to approach the court under The Guardians and Wards Act, 1890. Muslims, Christians and Parsis can take a child under the said Act only under foster care. Once a child under foster care attains the age of majority, that is eighteen years old, he is free to break away all these connections. Besides, such a child does not have the legal right of inheritance. Foreigners, who want to adopt Indian children, have to approach the court under the aforesaid Act.

The Hindu law relating to adoption has been amended and codified into the Hindu Adoptions and Maintenance Act, 1956, under which a male or female Hindu having legal capacity, can take a son or a daughter in adoption. In dealing with the question of guardianship of a minor child, as in other spheres of family law, there is no uniform law. Hindu law, Muslim Law and the Guardians and Wards Act, 1890, are three distinct legal systems which are prevalent. A guardian may be a natural guardian, testamentary guardian or a guardian appointed by the court. In deciding the question of guardianship, two distinct things have to be taken into account—person of the minor and his property. Often the same person is not entrusted with both. Though The Personal Laws (Amendment) Act, 2010, the Hindu Adoptions and Maintenance Act, 1956, was amended, so as to remove the incapacity of married women to take in adoption of a son or a daughter merely on the basis of her marital status and to provide that the mother with the consent of the father and the father with the consent of the mother shall have equal rights to give in adoption of their children.

The Hindu Minority and Guardianship Act, 1956, has codified laws of Hindus relating to minority and guardianship. As in the case of uncodified law, it has upheld the superior right of father. It lays down that a child is a minor till the age of 18 years. Prior right of mother is recognised only for the custody of children below five. In case of illegitimate children, the mother has a better claim than the putative father. The Act makes no distinction between the person of the minor and his property and therefore guardianship implies control over both. Under the Muslim Law (Shariat), the father enjoys a dominant position. It also makes a distinction between guardianship and custody. For guardianship,

which has usually reference to guardianship of property, according to Sunnis, the father is preferred and in his absence his executor. If no executor has been appointed by the father, the guardianship passes on the paternal grandfather to take over responsibility and not that of the executor. Both schools, however, agree that father while alive is the sole guardian. Mother is not recognised as a natural guardian even after the death of the father. As regards rights of a natural guardian, there is no doubt that father's right extends both to the property and person of the child. Even when mother has the custody of minor child; the father's general right of supervision and control remains. Father can, however, appoint mother as testamentary guardian. Thus, though mother may not be recognised as natural guardian, there is no objection to her being appointed under the father's will.

The Muslim law recognises that mother's right to custody of minor children is an absolute right. Even the father cannot deprive her of it. Misconduct is the only condition which can deprive the mother of this right. As regards the age at which the right of mother to custody terminates, the Shia school holds that mother's right is only during the period of rearing which ends when the child completes the age of two, whereas the Hanafi school extends the period till the minor son has reached the age of seven. In case of girls, Shia law upholds mother's right till the girl reaches the age of seven and Hanafi school till she attains puberty.

The general law relating to guardians and wards is contained in the Guardians and Wards Act, 1890. It clearly lays down that father's right is primary and no other person can be appointed unless the father is found unfit. This Act also provides that the court must take into consideration the welfare of the child while appointing a guardian under the Act. The Personal Laws (Amendment) Act, 2010, the Guardians and Wards Act, 1890, was amended so as to include the mother along with the father as a fit person to be appointed as a guardian of a child so that the courts shall not appoint any other person as a guardian of a minor if either of the parents is fit to be the guardian of such minor.

Maintenance

Obligation of a husband to maintain his wife arises out of the status of the marriage; right to maintenance forms a part of the personal law.

Under the Code of Criminal Procedure, 1973, right of maintenance extends not only to the wife and dependent children, but also to indigent parents and divorced wives. Claims of the wife, etc., however, depends on the husband having sufficient means. Claim of maintenance for all dependent persons was limited to ₹ 500 per month. But, this limit was removed by the Code of Criminal Procedure (Amendment) Act, 2001. Inclusion of the right of maintenance under the Code of Criminal Procedure has the advantage of making the remedy both speedy and cheap. However, divorced wives who have received money payable under the customary personal law are not entitled to claim maintenance under the Code of Criminal Procedure.

Under the Hindu Law, the wife has an absolute right to claim maintenance from her husband. But she loses her right if she deviates from the path of chastity. Her right to maintenance is codified in The Hindu Adoptions and Maintenance Act, 1956. In assessing the amount of maintenance, the court takes into account various factors like position and liabilities of the husband. It also judges whether the wife is justified in living apart from husband. Justifiable reasons are spelt out in the Act. Maintenance (pending the suit) and even expenses of a matrimonial suit will be borne by either, husband or wife, if the other spouse has no independent income for his or her support. The same principle will govern payment of permanent maintenance.

The Personal Laws (Amendment) Act, 2019 further amended the Divorce Act, 1869 (4 of 1869), the Dissolution of Muslim Marriages Act, 1939 (8 of 1939), the Special Marriage Act, 1954 , the Hindu Marriage Act, 1955 and the Hindu Adoptions and Maintenance Act, 1956 so as to omit the provisions that are discriminatory to the leprosy affected persons contained therein. The Amendment Act came into force on March 1, 2019.

Under the Muslim Law, The Muslim Women (Protection of Rights on Divorce) Act, 1986, protects rights of Muslim women who have been divorced by or have obtained divorce from their husbands and provides for matters connected therewith or incidental thereto. This Act, provides that a divorced Muslim woman shall be entitled to: (a) reasonable and fair provision and maintenance to be made and paid to her within the period by her former husband; (b) where she herself maintains children

born to her before or after her former husband for a period of two years from the respective dates of birth of such children; (c) an amount equal to the sum of or dower agreed to be paid to her at the time of her marriage or at any time thereafter according to the Muslim Law; and (d) all property given to her before or at the time of marriage or after her marriage by her relatives or friends or by husband or any relatives of the husband or his friends.

In addition, the Act also provides that where a divorced Muslim woman is unable to maintain herself after the period the magistrate shall order directing such of her relatives as would been titled to inherit her property on her death according to the Muslim Law and to pay such reasonable and fair maintenance to her as he may determine fit and proper, having regard to the needs of the divorced woman, standard of life enjoyed by her during her marriage and means of such relatives and such maintenance shall be payable by such relatives in proportion to the size of their inheritance of her property and at such periods as he may specify in his order.

Where such divorced woman has children, the magistrate shall order only such children to pay maintenance to her and in the event of any such children being unable to pay such maintenance, the magistrate shall order parents of such divorced woman to pay maintenance to her. In the absence of such relatives or where such relatives are not in a position to maintain her, the magistrate may direct the state Wakf Board established under Section 13 of the Wakf Act, 1995, functioning in the area in which the woman resides, to pay such maintenance as determined by him.

The Muslim Women (Protection of Rights on Marriage) Bill, 2019, which replaced the Muslim Women (Protection of Rights on Marriage) Second Ordinance, 2019, was enacted as Act 20 of 2019 on the July 31, 2019. The enactment is for prevention of divorce by way of talaq-e-biddat by certain Muslim husbands in spite of the same having been set aside by the Supreme Court. This Act is in force from September 19, 2018, (i.e. the date from which the first Ordinance, namely, the Muslim Woman (Protection of Rights on Marriage) Ordinance, 2018.

The Parsi Marriage and Divorce Act, 1936, recognises the right of wife to maintenance—both alimony and permanent alimony. The maximum amount that can be decreed by the court as alimony during the

time a matrimonial suit is pending in court, is one-fifth of the husband's net income. In fixing the quantum as permanent maintenance, the court will determine what is just, bearing in mind the ability of husband to pay, wife's own assets and conduct of the parties. The order will remain in force as long as wife remains chaste and unmarried. The Divorce Act, 1869, governs maintenance rights of a Christian wife. The provisions are the same as those under the Parsi Law and the same considerations are applied in granting maintenance, both alimony and permanent maintenance.

Succession

The Indian Succession Act was enacted in 1925 to consolidate the law applicable to intestate and testamentary succession which was in existence at that time. The Act does not apply to the residents of the union territory of Puducherry. While consolidating the law in respect of succession, two schemes, one relating to succession to property of persons like Indian Christians, Jews and persons married under The Special Marriage Act, 1954 and the other relating to succession rights of Parsis, were adopted.

In the first scheme, applying to those other than Parsis, in the case of a person dying intestate leaving behind a widow and lineal descendants, the widow would be entitled to a fixed share of one-third of property and lineal descendants shall be entitled to the remaining two-thirds. This law was amended subsequently with the objective of improving rights of widows and it was provided that where the intestate dies leaving behind his widows and no lineal descendant and the net value of the estate does not exceed 5,000, the widow would be entitled to the whole of his property. Where the net value of the estate exceeds 5,000, she is entitled to charge a sum of 5,000 with interest at 4 per cent payment and in the residue, she is entitled to her share. The Act imposes no restriction on the power of a person to will away his property.

Under the second scheme, the Act provides for Parsi intestate succession. By The Indian Succession (Amendment) Act, 1991, the Act was amended to provide equal shares for both sons and daughters in their parental properties, irrespective of the fact that it was that of the father or that of the mother. It also enables the Parsis to bequeath their property to religious or charitable purposes, etc., without any restrictions. In effect,

the amended law provides that where a Parsi dies intestate leaving behind a widow or widower as the case may be and children, the property shall be divided so that the widow or widower and each child receives equal share. Further, where a Parsi dies leaving behind one or both parents in addition to children, or widow/widower and children, the property shall be so divided that the parent or each of the parents shalI receive a share equal to half the share of each child.

This Act was amended by The Indian Succession (Amendment) Act, 2002. It was felt that Section 32 of the Principal Act is discriminatory to widows and as such the proviso to Section 32 was omitted to remove discrimination in this regard. Section 213 was also amended by this amending Act to make Christians at par with other communities.

The law relating to testamentary succession among Hindus, Buddhists, Sikhs or Jains, subject to certain restrictions and modifications is carried in Section 57 of the Indian Succession Act, 1925, read within the Third Schedule. The law relating to intestate succession among Hindus is codified in the Hindu Succession Act, 1956. It extends to the whole of India except the former state of Jammu and Kashmir. The remarkable features of the Act are the recognition of the right of women to inherit property of an intestate equally with men and abolition of the life estate of female heirs. Further (vide The Hindu Succession (Amendment) Act, 2005), the Hindu Succession Act, 1956, was amended so as to provide for the equal share to a coparcener daughter in a joint Hindu property.

A vast majority of Muslims in India follow Hanafi doctrines of Sunni law. Courts presume that Muslims are governed by Hanafi law unless it is established to be the contrary. Though there are many features in common between Shia and Sunni schools, yet there are differences in some respects. Sunni law regards Quranic verses of inheritance as an addendum to pre-lslamic customary law and preserves the superior position of male agnates. Unlike Hindu and Christian laws, Muslim law restricts a person's right of testation. A Muslim can bequeath only one-third of his estate. A bequest to a stranger is valid without the consent of heirs if it does not exceed a third of the estate, but a bequest to an heir without the consent of other heirs is invalid. Consent of heirs to a bequest must be secured after the succession has opened and any consent given to a bequest during the life time of the testator can be retracted after his

death. Shia law allows Muslims the freedom of bequest within the disposable third.

Anand Marriage (Amendment) Act, 2012

The Anand Marriage Act, 1909 was enacted to remove doubts as to the validity of the marriage rights of the Sikh called "Anand" and it does not provide for the provisions of registration of marriages. The Hindu Marriage Act, 1955, applies to all Hindus, Buddhists, Jains or Sikhs by religion. It also applies to all other persons who are not Muslims, Christians, Parsis or Jews unless they establish that they were not governed by Hindu law, custom or usage prior to the Act. Section 8 of the Hindu Marriage Act, 1955, provides for registration of Hindu marriages and as Sikhs were included in the definition of Hindu, under Section 2 of the Hindu Marriage Act, 1955, a Sikh marriage performed according to the Sikh marriage ceremony called "Anand" or other customary ceremonies could be registered here under the provisions of Section 8 of the Hindu Marriage Act, 1955.

However, vide The Anand Marriage (Amendment), Act, 2012, The Anand Marriage Act, 1909 was amended to provide for registration of Anand marriages commonly known as Anand Karaj.

Election Laws and Electoral Reforms

The Acts in connection with the conduct of elections to Parliament, state legislatures and to the offices of the President and the Vice President are: (i) The Representation of the People Act, 1950; (ii) The Representation of the People Act, 1951; (iii) The Presidential and Vice-Presidential Elections Act, 1952; (iv) The Delimitation Act, 2002; (v) The Andhra Pradesh Legislative Council Act, 2005; and (vi) The Tamil Nadu Legislative Council Act, 2010. These are administrated by the Legislative Department, Ministry of Law and Justice.

The electoral system of the country is also called the first-past-the-post system of elections.

The continuously changing electoral scenario has necessitated reforms of electoral laws on several occasions. In the light of the experience gained during elections, recommendations of the Election Commission, the proposals from different sources including political parties, eminent

men in public life and the deliberations in the Legislatures and various public bodies, the successive governments have taken a number of measures, from time to time, to bring about electoral reforms; though need to effect a comprehensive package of electoral reforms cannot be gainsaid. At present the issue of electoral reforms in its entirety has been referred to the Law Commission of India for its examination and report. On receipt of the report of the Law Commission, the matter will be examined in consultation with the stakeholders.

Delimitation of Constituencies

The periodic readjustment of the Lok Sabha and Assembly constituencies is mandatory in a representative system where single-member constituencies are used for electing political representatives. The electoral boundaries are drawn on the basis of the last published census figures and are relatively equal in population. Equally populous constituencies allow voters to have an equally weighted vote in the Legislature. Electoral constituencies that vary greatly in population - a condition called "malapportionment" - violate a central tenet of democracy, namely, that all voters should be able to cast a vote of equal weight. Delimitation and Elections are the two basic pillars of a parliamentary democracy.

The first Delimitation Commission in India was constituted in 1952, the second in 1962 and the third in the year 1973. The third delimitation exercise -based on 1971 census - was completed in the year 1975. The present delimitation, based on 2001 census, has been undertaken after 30 years. The population increased by almost 87 per cent and the nature of constituencies in the country, by and large, had become malapportioned.

The government, as part of the National Population Policy strategy, decided to extend the current constitutional freeze on undertaking fresh delimitation up to 2026 as a motivational measure to enable state governments to fearlessly pursue the agenda for population stabilisation. It has also been decided, however, to simultaneously undertake readjustment and rationalisation of electoral constituencies, including those reserved for the Scheduled Castes and the Scheduled Tribes, based on the population census for the year 1991, without affecting the number of seats allocated to states in the legislative bodies so as to correct the imbalance caused due to uneven growth of population/electorate in

different constituencies. The Constitution (Eighty-fourth Amendment) Act, 2001 enacted in 2002, has effected the aforesaid policy decisions of the government. Pursuant to the enactment of the Constitution (Eighty-fourth Amendment) Act, 2001, which provided for readjustment of electoral constituencies, including those reserved for the Scheduled Castes and the Scheduled tribes. The Delimitation Act, 2002, was enacted. The Delimitation Commission had accordingly been constituted in 2002 under the provisions of the Delimitation Act, 2002 with Shri Justice Kuldip Singh, a retired judge of the Supreme Court as its Chairperson and Shri B.B. Tandon, Election Commissioner in the Election Commission of India and the State Election Commissioner as its members. The main task of the Commission was to readjust the division of territorial constituencies of the seats in the House of the People allocated to each state and the readjustment of the division of territorial constituencies of the total number of seats in the Legislative Assembly of each state. Subsequent to that the Constitution (Eighty-seventh Amendment) Act, 2003 was enacted and by that Act the basis of the delimitation of territorial constituencies was changed based on the 2001 census in place of 1991.

Although the rules for delimitation vary across countries, tasks involved in drawing boundaries are generally similar. In India, the drawing of boundaries, generally, entails: (a) allocating seats to the states and districts within a state; (b) creating a database composed of maps, population figures and the details showing geographic/natural/administrative conditions of the area concerned; (c) associating the statutory representatives from the Lok Sabha and State Assemblies; (d) distributing the states and districts into geographic units called the constituencies; (e) having an extensive exercise for public input into delimitation process; (f) summarising and evaluating the constituencies; and (g) passing and publishing the final order. The procedure for delimiting the constituencies in India stands clearly spelt out in The Delimitation Act, 2002. This legal framework provides for an independent and impartial Delimitation Commission. The final orders of the Commission are not subject to any modification or veto by the government.

The Delimitation Commission functioned in a transparent manner. The methodology and guidelines were clearly established and published

in advance. While framing the constituencies, the Commission—as far as practicable—kept in view the interest of communities such as those sharing a common tribe, race or ethnic background and also those defined geographically or by physical features like mountains, forests, rivers, etc. The Commission drew the boundaries of the constituencies reserved for scheduled castes and scheduled tribes strictly in accordance with the constitutional and statutory provisions. After getting finality of the delimitation exercise, in pursuance of the second proviso to Article 82 and second proviso to clause (3) of Article 170 of the Constitution, a Presidential Order dated February 19, 2008, was issued making new delimitation effective throughout the country. However, Section 10(B) of the Delimitation Act, 2002, deferred the legal effect of the 2007 delimitation order in relation to the state of Jharkhand.

With the issuance of the Presidential Order specifying the date on which the delimitation orders notified by the Delimitation Commission shall take effect, it was necessary to amend the relevant provisions and the First and Second Schedules of the Representation of the People Act, 1950, to reflect the changes made by the delimitation orders notified by the Delimitation Commission. As a consequential requirement, the Representation of the People (Amendment) Act, 2008, amending the Representation of the People Act, 1950, in conformity with the delimitation was enacted and made effective from 2008. By this amendment Act, the First Schedule and the Second Schedule to the Representation of the People Act, 1950, were replaced including other amendments. Further, a new Section 8(A) was inserted in the Representation of the People Act, 1950, which, provided that if the President of India is satisfied that the situation and the conditions prevailing in Arunachal Pradesh, Assam, Manipur or Nagaland are conducive for the conduct of delimitation exercise, he may, by order, rescind the said deferment orders issued under Section 10(A) of The Delimitation Act, 2002 in relation to any of those states and provide for the conduct of delimitation exercise in the states by the Election Commission of India. Further, the Election Commission of India, as per sub-Section (2 of Section 8(A) of The Representation of the People Act, 1950, has now been empowered to undertake fresh delimitation in respect to the aforementioned four states as soon as, may be after the deferment orders in respect to these states are rescinded. Afresh delimitation

exercise will be initiated as and when conditions prevailing in these states become conducive to the conduct of delimitation exercise.

After the issuance of the Presidential Order of 2008, the Delimitation Commission had issued eight (8) orders/corrigenda amending its earlier orders in respect of Karnataka, West Bengal, Uttar Pradesh, Tamil Nadu, NCT of Delhi, Bihar and Gujarat.

Reservation of Seats for Women

During the years, a consistent demand has been made for giving adequate representation to women in Parliament and state legislatures. Such a demand finds support in the 73 and 74 Amendments to the Constitution made in 1992. There was a proposal to amend the Constitution and to provide for reservation in Parliament and state legislatures.

Electronic Voting Machines

The use of Electronic Voting Machines (EVMs) was started in the country on experiment basis in 1982. It took more than two decades for the universal use of EVMs and during the General Elections to the Lok Sabha in 2004, EVMs were used in all polling stations across the country. Thereafter, EVMs are being used in all the elections of the House of the People and state assemblies. The EVMs were developed at the behest of the Election Commission jointly with two Public Sector Undertakings, Bharat Electronics Limited (BEL), Bengaluru and Electronics Corporation of India Limited (ECIL), Hyderabad in 1989.

Electors' Photo Identity Cards

The use of electors' photo identity cards (EPICs) by the Election Commission was started in 1993 throughout the country to check bogus voting and impersonation of electors at elections. The electoral roll is the basis for issue of EPICs to the registered electors. The electoral rolls are normally revised every year with 1st January of the year as the qualifying date. Every Indian citizen who attains the age of 18 years or above as on that date is eligible for inclusion in the electoral roll and can apply for the same. Once she/he is registered in the roll, she/he would be eligible for getting an EPIC. The scheme of issuing the EPICs is, therefore, a continuous and ongoing process for the completion of which no time limit can be fixed.

However, constant efforts are being made to issue EPIC to all such persons whose names have already been enrolled in the electoral roll, as early as possible. Some of them are: (i) special photography campaigns are organised to make EPIC of all voters; (ii) voters are allowed to give copies of their photographs which are scanned for making EPIC; (iii) booth level officers are appointed by the Commission to collect photographs and make EPIC of all voters; (iv) 25th January has been declared as the National Voters' Day to focus on enrolment of voters and making EPIC; (v) special publicity campaign is undertaken to inform electors of the procedure of preparation of EPIC; and (vi) instruction has been issued that the EPIC number once issued will be valid throughout the elector's life even if address changes.

Voting Rights to the Citizens of India Living Abroad

Section 19 of the Representation of the People Act, 1950 provides that every person who is not less than 18 years of age on the qualifying date and is ordinarily a resident in the constituency shall be entitled to be registered in the electoral rolls for that constituency. The meaning of "ordinarily resident" is laid down in Section 20 of the said Act. It has been specified under Chapter-Ill in the Hand Book for Electoral Registration Officers that a person who has gone out of the country for business or employment should be treated as having moved out of that place. Mere ownership or possession of a building or other immovable property will not bestow on the owner, the residential qualification.

There are a large number of Indian citizens residing outside the country due to various reasons. They have been persistently demanding for conferring them the voting rights.

The government considered all aspects of the demand and accordingly introduced the Representation of the People (Amendment) Bill, 2006, in Rajya Sabha in 2006 to enable the Indian citizens absenting from their place of ordinarily residence in India owing to their employment, education or otherwise outside India, to get their names registered in the electoral rolls of the concerned constituency of their place of ordinarily residence in India as mentioned in their passport so that they would be in a position to cast their votes in elections to the Lok Sabha and to the state legislatures in case they happen to be in their constituency at the time of polls.

In pursuance of the recommendations of the Standing Committee, the government has withdrawn, with the leave of the Rajya Sabha, the earlier Bill, namely, The Representation of the People (Amendment) Bill, 2006, introduced on February 27, 2006 in the Rajya Sabha and introduced a fresh Bill, namely, The Representation of the People (Amendment) Bill, 2010, in August 2010, to amend the Representation of the People Act, 1950 to: (a) provide that every citizen of India, whose name is not included in the electoral roll and who has not acquired the citizenship of any other country and who is absenting from his place of ordinary residence in India owing to his employment, education, or otherwise outside India (whether temporarily or not), shall be entitled to have his name registered in the electoral roll in the constituency in which his place of residence in India as mentioned in his passport is located; (b) provide that the Electoral Registration Officer shall make corrections of entries in electoral rolls and inclusion of names in electoral rolls after proper verification; and (c) confer power upon the central government to specify, after consulting the Election Commission of India, by rules, the time within which the name of persons referred to in sub-paragraph above shall be registered in the electoral roll and the manner and procedure for registering of such persons in the electoral roll.

The said Bill has been enacted as the Representation of the People (Amendment) Act, 2010. In pursuance of the provisions of the said Act the central government, in consultation with the Election Commission prepared and published the Registration of Electors (Amendment) Rules, 2011, on February 3, 2011, and Registration of Electors (Second Amendment) Rules 2011 on February 23, 2011. The central government has issued necessary notification bringing the Act into force from February 2011. The Indians overseas can now furnish the documents self-attested by them and get their name enrolled in the electoral roll of their respective constituency.

Reservation of Seats for Scheduled Castes and Scheduled Tribes

Our Constitution makers were fully conscious of the fact that the Scheduled Castes and Scheduled Tribes had been an oppressed and underprivileged class in our society over the centuries and they deserved

a special dispensation so that their condition may be vastly improved. Forthis purpose, several special provisions were incorporated in our Constitution. One such provision related to the reservation of seats for these communities in Lok Sabha and state legislative assemblies. This provision found place in Articles 330 and 332 of the Constitution. Similarly, they were also sensitive of the difficulties and problems which were likely to be faced by the persons belonging to Anglo Indian community in the country. Consequently, adequate safeguards were provided for them in our Constitution by giving representation to this small section of the society, under Article 331 of the Constitution by way of nomination of two persons of that community in the House of the People by the President.

Likewise, provision for nomination of one member each by the Governor, wherever necessary, belonging to this community in the state legislative assemblies was also incorporated. Initially, the aforesaid provisions were made only for a period often years from the commencement of the Constitution. Although several steps have been initiated by the government from time to time for improving the socio-economic status of the Scheduled Castes and Scheduled Tribes, yet they are still far behind other communities. Even in the political field, they are not yet able to come up and get themselves elected to the representative bodies on their own in adequate numbers. Similarly, there are still a small section of Anglo Indians which need representation in the elected bodies. Consequently, the provision initially made for a period of ten years has been extended from time to time. Recently, through the Constitution (One Hundred Ninth Amendment) Bill, 2009, extension of the period for a further ten years has been passed by both the Houses of Parliament and received the assent of the President in January 2010. The said Bill was enacted as the Constitution (Ninety-fifth Amendment) Act, 2009.

21 Labour, Skill Development and Employment

Labour

THE Ministry of Labour and Employment is one of the important and oldest ministries of the Government of India. The main responsibility entrusted to the Ministry is to protect and safeguard the interests of workers in general and the poor, deprived and disadvantaged sections of the society, in particular. Further, the Ministry aims to create a healthy work environment for higher production and productivity and to develop and coordinate vocational skill training and employment services. To keep itself in tandem with the process of liberalisation, the Ministry's attention is focused on promotion of welfare of labour and for providing social security to the labour force both in the organised and unorganised sectors. These objectives are sought to be achieved through implementation of various labour laws, which regulate the terms and conditions of service and employment of workers. Labour being the subject in the Concurrent List under the Constitution of India, the state governments are also empowered to enact legislations.

Website: www.labour.gov.in

New Initiatives

Shram Yogi Maan-Dhan Yojana

Govenment of India introduced a pension scheme for unorganised workers under Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) to ensure old age protection for unorganised workers. Enrollment under the Scheme has started since February 2019.

The unorganised workers mostly engaged as home-based workers, street vendors, mid-day meal workers, head loaders, brick kiln workers, cobblers, rag pickers, domestic workers, washermen, rickshaw pullers, landless labourers, own account workers, agricultural workers,

construction workers, beedi workers, handloom workers, leather workers, audio-visual workers and those engaged in similar other occupations, whose monthly income is ₹ 15,000 per month or less are eligible to enroll under PY-SYM subject to these conditions: These should belong to the entry age group of 18-40 years; should not be covered under New Pension Scheme (NPS); Employees' State Insurance Corporation (ESIC) scheme or Employees' Provident Fund Organisation (EPFO); and should not be an income tax payee.

PM-SYM is a voluntary and contributory pension scheme on a 50:50 basis, where prescribed age-specific contribution shall be made by the beneficiary and the matching contribution by the central government as per the Scheme guidelines. For example, if a person enters the scheme at the age of 29 years, she/he is required to contribute ₹ 100 per month till the age of 60 years. An equal amount of ₹ 100 will be contributed by the central government. A subscriber would receive the following benefits: (i) Minimum Assured Pension: each subscriber under the PM-SYM, shall receive minimum assured pension of ₹ 3,000 per month after attaining the age of 60 years; (ii) Family Pension: during the receipt of pension, if the subscriber dies, the spouse of the beneficiary shall be entitled to receive 50 per cent of the pension received by the beneficiary as family pension. Family pension is applicable only to spouse; (iii) if a beneficiary has given regular contribution and died due to any cause (before the age of 60 years), his/her spouse will be entitled to join and continue the scheme subsequently by payment of regular contribution or exit the scheme as per provisions of exit and withdrawal.

The subscriber's contributions to PM-SYM is through 'auto-debit' facility from his/ her savings bank account/Jan-Dhan account and it ranges from ₹ 55 to ₹ 200 per month depending at the entry age of the subscriber. The subscriber is required to contribute the prescribed contribution amount from the age of joining PM-SYM till the age of 60 years. The Scheme is being implemented through LIC and Common Services Centres-SPV. LIC is the Pension Fund Manager and responsible for Pension pay out, CSC-SPV is responsible for enrolling the beneficiaries through its approx. 3 lakh CSCs across the country. Under the scheme, contribution amount for the first month is being paid in cash.

National Career Service Project

The Ministry is implementing the National Career Service (NCS) Project as a Mission Mode Project for transformation of the National Employment Service to provide a variety of employment-related services like career counselling, vocational guidance, information on skill development courses, apprenticeship, internships etc. The NCS Portal (www.ncs.gov.in) was started in 2015. The NCSP is supported by a dedicated helpdesk (multilingual) available from Tuesday to Sunday (8.00 AM to 8.00 PM) on 18004251514 for assisting users. It has a rich repository of career content of over 3,600 occupations.

The NCS Project has also been enhanced to interlink all employment exchanges with the NCS Portal so that services can be delivered online. The scheme provides for part funding to states for IT upgradation and minor refurbishing of Employment Exchanges and for organising job fairs.

Pradhan Mantri Rojgar Protsahan Yojana

The Ministry is also implementing Pradhan Mantri Rojgar Protsahan Yojana (PMRPY) since 2016-17 with the objective of promoting employment generation with an allocation of ₹ 1,000 crores. Under the scheme, Government of India will pay the Employees' Pension Scheme (EPS) contribution of 8.33 per cent for all new employees enrolling in Employees' Provident Fund Organisation (EPFO) for the first three years of their employment. This will incentivise the employers to recruit unemployed persons and also to formalise informal employees. The Scheme will be applicable to those having earnings of ₹ 15,000 per month. A budget provision of ₹ 1,000 crore for this Scheme has been made.

Labour Inspection Scheme

A computerised list of inspections is generated randomly based on risk based objective criteria. Serious matters are to be covered under the mandatory inspection list. Mandatory uploading of inspection reports is to be done within 72 hours.

Shram Suvidha Portal

The Ministry has developed a unified web portal 'Shram Suvidha Portal' to bring transparency and accountability in enforcement of labour laws and ease compliance. It caters to four major organisations under the

Ministry namely Office of Chief Labour Commissioner (Central); Directorate General of Mines Safety; Employees' Provident Fund Organisation; and Employees' State Insurance Corporation.

Single Unified Annual Return

Ministry of Labour and Employment has started Single Unified Annual Return for eight Labour Acts. This facilitates filing of simplified Single Online Return by the establishments instead of filing separate Returns, under these Acts: (i) The Payment of Wages Act, 1936; (ii) The Minimum Wages Act, 1948; (iii) The Contract Labour (Regulation and Abolition) Act, 1970; (iv) The Maternity Benefit Act, 1961; (v) The Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act, 1996; (vi) The Payment of Bonus Act, 1965; (vii) The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979; and (viii) The Industrial Disputes Act, 1947.

Common Registration

Facility for Common Registration under five Central Labour Acts has been developed on e-Biz portal of the Department of Industrial Policy and Promotion. The Acts covered under this include: The Employees Provident Fund and Miscellaneous Provisions Act, 1952; The Employees State Insurance Act, 1948; The Building & Other Construction Workers (RECS) Act, 1996; The Contract Labour (Regulation & Abolition) Act, 1970; and The Inter-State Migrant Workmen (RECS) Act, 1979.

Labour Codes

This Ministry has taken a number of initiatives for bringing transparency and accountability in enforcement of labour laws, with the objective of strengthening the safety, health, social security measures for every worker and bringing ease of compliance for running an establishment to catalyse creation of employment opportunities. These initiatives include governance reforms through use of technology and also legislative reforms by simplifying, rationalising and amalgamating the existing labour laws into four labour codes.

Legislative Initiatives

Draft Small Factory Bill

The Bill provides for regulation of working and service conditions of workers in small manufacturing units employing less than 40 workers. The Bill amalgamates, simplifies and rationalises the provisions of six Labour Laws at one place for these small factories. The Bill will ease the operation of small factories and thus catalyse the generation of employment through small factories while ensuring, interalia social security, safety and health of the workers.

Social Security

Employees' State Insurance Corporation

To provide medical care and cash benefits in case of sickness, maternity and employment injuries, the Employees' State Insurance Act was enacted in 1948. Employees' State Insurance Corporation (ESIC) is implementing the ESI Scheme since 1952. The achievements are as follows:

Health Reforms Agenda of ESIC: A series of Health Reforms Agenda were launched. These include online availability of Electronic Health Record of ESI Beneficiaries (insured persons and their family members); Abhiyan Indradhanush: ensuring the change of bed sheet according to VIBGYOR pattern during the week, i.e., to be changed everyday; Medical Helpline No. 1800 11 3839 for emergency and seeking guidance from casualty/emergency of ESIC hospitals; and special OPD for senior citizens and differentlyabled persons in ESIC hospitals, in the afternoon.

Some of the other salient features of ESIC 2.0 were upgrading dispensaries to six-bedded hospitals in phases; providing of appropriate cancer detection; cardiology/treatment; yoga facilities at different levels of hospitals; dialysis facilities in all ESIC Model Hospitals on PPP Mode; all possible pathological facilities in hospital premises by outsourcing or by upgrading; Queue Management System in every hospital for helping in registration and pharmacy; behavioural training to paramedical and other staff of the hospitals guiding them to provide due courtesy in dealing with the patients/attendants; feedback system for all indoor patients; proper and attractive signages at the required places in all ESIC Hospitals for guidance and proper communications to the visitors; AYUSH facilities to be extended up to the dispensary level in phases; and tele-medicine facilities for the beneficiaries in phases.

Digital India—e-initiatives of ESIC

e-biz Platform: ESIC was the first organisation of central government to integrate its services (Registration of Employers through e-biz portal of Department of Industrial Policy and Promotion [DIPP] to promote ease of business and curb transaction costs.

e- ***Pehchan:*** A process of establishing the identity of the insured person through Aadhaar number has been set up by seeding Aadhaar number to the insurance number. This has simplified the identification process of the insured person and his/her dependents at various points of contact during all types of benefit disbursement. The process has enabled to do away with the cumbersome process of making insured persons and their dependents to visit offices to get their biometrics taken for issuance of a pehchan card.

Mobile App for IPs: Our IPs have been provided with a Mobile App "Ask An Appointment" (AAA+) to enable them to book an appointment with the doctors online prior to actually making a visit to the hospital.

Incorporation of Government Directives: Various Government Directives regarding GeM, E-Office etc., have either been incorporated or are in the process of incorporation, adaptation and adoption.

Empowerment to IP: A system is in place to enable the workers to verify their status as covered/uncovered along with their wages/attendance/contribution deposited by their employers. ICT division has successfully upgraded the system commensurate with the rapid growth of ESIC in addition to the changing business rules and environment, i.e., (a) incorporation of reduced rate of contribution for employers in newly implemented areas; (b) incorporating the enhancement in wage ceiling limit from ₹ 15,000 to ₹ 21,000; and (c) the date of payment of ESI contribution has been changed to 15th day after the end of the month.

Unemployment Allowance under Rajiv Gandhi Shramik Kalyan Yojana (RGSKY) has been enhanced from 12 to 24 months. In order to get benefits under RGSKY, the eligibility of contribution condition has also been reduced from three to two years for getting the benefits. In order to encourage employment of disabled persons, the employers' share of contribution in respect of such disabled employees is paid by the

central government for initial ten years. The employers are exempted from paying their share of contribution up to 10 years in respect of all permanently disabled persons irrespective of their wages working in factories and establishments covered under ESI Act.

ESIC has launched a new scheme 'One IP-Two Dispensaries' for the benefit of migrant workers. Now, through employer, the insured women/persons can choose two dispensaries, one for self and another for family residing at different locations of the country.

Employees' Provident Fund Organisation

The Employees' Provident Funds (EPF) and Miscellaneous Provisions Act, 1952, provides for Provident Fund, Pension Scheme and Insurance Fund in factories/establishments employing twenty or more employees in industries mentioned in Schedule-I to the Act. The following three schemes framed are: Employees' Provident Funds Scheme, 1952; Employees' Pension Scheme, 1995; and Employees' Deposit-Linked Insurance Scheme, 1976. The Government of India through the Employees' Provident Fund Organisation (EPFO) administers the Employees' Provident Fund and Miscellaneous Provisions (EPF&MP) Act, 1952.

Although for monitoring compliance of covered establishments, the system assisted tool in the form of CCTS (Computerised Compliance Tracking System) was provided to the field offices of EPFO, no concrete system or procedure for detection of coverable establishment was available to the compliance machinery. It resulted in belated coverage of establishments with consequential legal implications as the establishments were mostly found coverable from retrospective dates but refused to take up past liability related to statutory dues, payment of interest and damages for belated remittance, prosecution cases etc. The Act is applicable on its own volition and these legal actions are attracted for non-compliance for whatsoever reason.

Online Registration

The EPFO has launched a portal for Online Registration of Establishments for the employers.

Universal Account Number

The facility of Universal Account Number (UAN) for EPF subscribers was formally launched in 2014. Portability is an inherent feature of the UAN programme. It provides automatic portability of Provident Fund account on change of employment if the employee has activated his UAN by seeding his Know Your Customer details (through the employer).

Pension Reforms

Minimum Pension

During the year, one of the long awaited demands for implementation of the minimum pension was given effect to. The central government is providing a minimum pension of ₹ 1,000 per month for member/widow(er)/disabled/ nominee/ dependent parent pensioners, ₹ 750 per month for orphan pensioners and ₹ 250 per month for children pensioners.

After implementation of the minimum pension notification the pension for all member/widow(er)/disabled/nominee/dependent parent pensioners whose original pension was less than ₹ 1,000 p.m. have been fixed at the minimum of ₹ 1,000 p.m. Deductions on account of benefits availed by members on the basis of choice exercised at the time of making claims like commutation, return of capital and short service are applied on the minimum pension of ₹ 1,000 p.m.

Industrial Relations

Twenty-two Central Government Industrial Tribunal (CGIT)-cum-Labour Courts have been set up under the provisions of the Industrial Disputes Act, 1947, for adjudication of industrial disputes in organisations for which the central government is the appropriate authority. Through Finance Act, 2017, the powers to settle the Appeals arising out of EPF&MP Act, 1952, have also been entrusted upon to these Tribunals. These Tribunals are located at Dhanbad (Jharkhand), Mumbai, New Delhi and Chandigarh (two courts each) and one each at Kolkata, Jabalpur, Kanpur, Nagpur, Lucknow, Bengaluru, Jaipur, Chennai, Hyderabad, Bhubaneswar, Ahmedabad, Ernakulam, Asansol and Guwahati. Further, the two Industrial Tribunals at Mumbai and Kolkata also function as National Tribunals.

In order to reduce pendency of cases, Lok Adalats are being organised by the CGIT-cum-Labour Courts as an Alternate Grievance Redressal System.

Child Labour

Child Labour is an area of great concern and the Government of India is committed to address the issue. Considering the magnitude and nature of the problem, it is following a robust multi-generation schemes. It comprises statutory and legislative measures, rescue and rehabilitation, universal elementary education along with social protection and poverty alleviation and employment generation schemes. The objective is to create an environment where families are not compelled to send their children to work. Government has adopted an approach to withdraw and rehabilitate working children from all occupations and processes.

Policy on Child Labour

The National Policy on Child Labour, announced in August 1987, addresses this complex issue in a comprehensive, holistic and integrated manner. The Action Plan under is multi-pronged and mainly consists of: a legislative action plan; project-based action in areas of high concentration of child labour; and focus on general development programmes for the benefit of the families of such labour.

Legislative Action Plan

Under the Legislative Action Plan, the Child Labour (Prohibition & Regulation) Act, was enacted in 1986. As per the provisions of the Act, the employment of children below the age of 14 years was prohibited in 18 occupations and 65 processes. Then the government followed it up with the Child Labour (Prohibition & Regulation) Amendment Act, 2016, which came into force from 2016. The Amendment interalia covers the complete prohibition on employment or work of children below 14 years of age in all occupations and processes; linking the age of the prohibition of employment with the age for free and compulsory education under Right to Education Act, 2009; prohibition on employment of adolescents (14 to 18 years of age) in hazardous occupations or processes and making stricter punishment for the employers contravening the provisions of the Act; and project-based action plan in the areas of high concentration of child labour. In pursuance of National Child Labour Policy, the National

Child Labour Project (NCLP) Scheme was started in 1988 to rehabilitate children rescued from child labour. It is an ongoing Central Sector Scheme and at present sanctioned in 270 districts in the country. Under the Scheme, working children are identified through child labour survey, withdrawn from work and put into the special training centres so as to provide them with an environment to subsequently join mainstream education system. In these special training centres, besides formal education, the children are provided stipend, supplementary nutrition, vocational training and regular health chec-kups.

As poverty is the primary cause of such a social evil, the educational rehabilitation of such children is further complemented by the economic rehabilitation of the families through the convergence approach so that the children and their families are covered under the benefits of the schemes of various ministries/departments.

Re-alignment of NCLP Scheme with RTE Act

With the enactment of Right to Education (RTE) Act, 2009, there was a need for realignment of the NCLP Scheme with the provisions of RTE Act, 2009. The NCLP Schools could now serve as special training centres for un-enrolled and out-of-school children in accordance with the provisions of Section 4 of the RTE Act and Rule 5 of the Right of Children for free and compulsory education (RTE) Rules, 2010. The name of 'The Child Labour (Prohibition & Regulation) Act, 1986' mentioned at SI. No. 13 of the list of Central Act provided in Chapter 1 has been replaced with 'The Child and Adolescent Labour (Prohibition & Regulation) Act, 1986' in 2016.

Bonded Labour

Rehabilitation of Bonded Labour

With a view to supplementing the efforts of the state governments, a Centrally Sponsored Plan Scheme for rehabilitation of bonded labour was launched in 1978. Under the scheme, state governments are provided central assistance on matching grants (50:50) basis for the rehabilitation of bonded labour. The said Plan Scheme was drastically modified in 2000 to provide for 100 per cent assistance for conducting district-wise surveys for identification of bonded labour, awareness generation activities, and evaluatory studies. The rehabilitation grant has also been

raised from ₹ 10,000 per identified bonded labour, to ₹ 20,000 per identified bonded labour. Further, in the case of north-eastern states, cent per cent rehabilitation grant is provided in case they fail to provide their matching contribution.

Wages and Bonus

The Minimum Wages Act, 1948

The Minimum Wages Act, 1948, was enacted to safeguard the interests of the workers mostly in the unorganised sector. Under the provision of the Act, both the central and state governments are the appropriate governments to fix, revise, review and enforce the payment of minimum wages to workers in respect of scheduled employments under their respective jurisdictions. There are 45 scheduled employments in the central and as many as 1,697 in the state sphere. The enforcement of the Minimum Wages Act, 1948, is ensured at two levels. While in the central sphere, the enforcement is done through the inspecting officers of the Chief Labour Commissioner (Central) commonly designated a Central Industrial Relations Machinery (CIRM), the compliance in the state is ensured through the state enforcement machinery.

In order to protect the minimum wages against inflation, the central government has introduced Variable Dearness Allowance (VDA) linked to the Consumer Price Index. As regards states/UT administrations, 27 of them have made VDA a component of minimum wages. Both central and state governments are revising the minimum wages in respect of these scheduled employments from time to time.

In order to have a uniform wage structure and to reduce the disparity in minimum wages across the country, a concept of National Floor Level Minimum Wage (NFLMW) was mooted on the basis of the recommendations of the National Commission on Rural Labour (NCRL) in 1991. NFLMW has been revised from time to time. The central government has revised the NFLMW from ₹ 137 to ₹ 160 per day from 2015. It, however, needs to be noted that the National Floor Level Minimum Wage, is a non-statutory measure.

Payment of Wages

The Payment of Wages Act, 1936, ensures timely payment of wages and that no unauthorised deductions are made from the wages of the workers. In exercise of the powers conferred by Sub-section (6) of Section 1 of the Act, the central government, on the basis of figures of the Consumer Expenditure Survey published by National Sample Survey Office, has enhanced the wage ceiling from ₹ 10,000 to ₹ 18,000 per month from 2012.

Payment of Wages (Amendment) Act, 2017: Section 6 of the Payment of Wages Act, 1936, was amended in 2017 to enable making payment of wages in cash or by cheque or by crediting in the bank account of the employee. The amendment also enables the appropriate government may, by notification in the Official Gazette, specify the industrial or other establishment, the employer of which shall pay to every person employed in such industrial or other establishment, the wages only by cheque or by crediting the wages in the bank account.

Payment of Bonus

The Payment of Bonus Act, 1965, has been amended to revise the statutory eligibility limit under Section 2 (13) from ₹ 10,000 to ₹ 21,000 per month and the calculation ceiling under Section 12 from ₹ 3,500 to ₹ 7,000 or the minimum wage for the scheduled employment, as fixed by the appropriate government, whichever is higher. The changes in the Payment of Bonus Act, 1965, are effective retrospectively from 2014.

Occupational Safety and Health

The provisions on Occupational Safety and Health (OSH) of workers as provided for in the Constitution of India are being implemented through the offices of Directorate General of Mines Safety (DGMS) and the Directorate General of Factory Advice Service and Labour Institutes (DGFASLI). The DGMS enforces the safety and health provisions for the workers in the mining industry through its Inspectors appointed under the Mines Act, 1952. The DGFASLI, through its Inspectorate of Dock Safety, enforces safety provisions in the docks and also acts as the coordinating agency at the national level for the Inspectorate of Factories functioning under different state governments.

The Prime Minister's Shram Awards are given to the workers employed in department/public sector undertakings of the central and state governments and the manufacturing units employing 500 or more workers in the private sector in recognition of their performance, devotion to duty, etc. The Vishwakarma Rashtriya Puraskars (VRPs) are given to individual workers or group of workers for their outstanding suggestions leading to improvement in productivity, safety and health as well as the import substitution resulting in the savings of foreign currency. The National Safety Awards (NSAs) are given in recognition of good safety performance on the part of the industrial establishments covered under the Factories Act, 1948, the employers covered under the Dock Workers (Safety, Health and Welfare) Act, 1986 and Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. The National Safety Award (Mines) are given at the national level in recognition of outstanding safety performance in mines covered under the Mines Act, 1952.

Research and Training

National Board for Workers' Education and Development

The Dattopant Thengadi National Board for Workers' Education and Development was established in 1958 to implement the Workers' Education Programmes at national, regional and unit/village level. The Board undertakes training programmes, which cover workers from organised, unorganised, rural and informal sectors. The main objective of the Board's training programmes is to create awareness among all sections of the working population. Supervisory and managerial cadres are also covered through joint education programmes.

With headquarters at Nagpur, the Board has a network of 50 regional and 8 sub-regional Directorates spread throughout the country. The six zonal Directorates at Delhi, Guwahati, Kolkata, Chennai, Mumbai and Bhopal monitor the activities of the regional directorates of their respective zone. The Board is tripartite in character and consists of representatives from central organisations of workers/employers, central/state governments and educational institutions.

V.V. Giri National Labour Institute, an autonomous body of the Ministry of Labour and Employment, set up in 1974, has grown into a

premier institute of labour research and training. Since its inception, the Institute has endeavoured through its research, training, education and publications to reach out to diverse groups concerned with various aspects of labour in the organised and unorganised sectors. The focus of such endeavours is the concern to transfer academic insights and understanding for application to policy formulation and action, so as to ensure a just place for labour in an egalitarian and democratic society.

Skill Development

Skill development and entrepreneurship efforts across the country have been highly fragmented so far. As opposed to developed countries, where the percentage of skilled workforce is between 60 and 90 per cent of the total workforce, India records an abysmal 4.69 per cent of workforce with formal vocational skills. There is a need for speedy reorganisation of the ecosystem of skill development and entrepreneurship promotion in the country to suit the needs of the industry and enable decent quality of life to its population. Currently, over 40 Skill Development Programmes (SDPs) are being implemented by over 18 Ministries/ Departments of the Government of India. However, there are gaps in the capacity and quality of training infrastructure as well as outputs, insufficient focus on workforce aspirations, lack of certification and common standards and a pointed lack of focus on the unorganised sector. In view of this and recognising the urgency of all concerned stakeholders in this field, a separate ministry was created in 2014, namely, the Ministry of Skill Development and Entrepreneurship. This Ministry is responsible for coordination of all skill development efforts; removal of disconnect between demand and supply of skilled manpower; building the vocational and technical training framework; skill upgradation, building of new skills; and innovative thinking not only for existing jobs but also jobs that are to be created. The Ministry aims to develop skill on a large scale with speed and high standards in order to achieve its vision of a 'skilled India'.

Website: www.msde.gov.in

It is aided in these initiatives by its function arms: National Skill Development Agency (NSDA), National Skill Development Corporation

(NSDC), National Skill Development Fund (NSDF) and 33 Sector Skill Councils (SSCs) as well as 187 training partners registered with NSDC.

National Skill Development Mission

The National Skill Development Mission was launched in 2015 on the occasion of World Youth Skills Day. It aims to create convergence and expedite cross-sectoral decisions through a high powered decision making framework. It is expected to converge, coordinate, implement and monitor skilling activities on a pan-India basis. It consists of a three-tier institutional structure, where the cascading functions of the bodies consist of providing policy directives and guidance, reviewing and monitoring overall progress, and actual implementation in line with Mission objectives. The Mission will also run select sub-missions in high priority areas. At the outset, seven sub-missions have been proposed in the following areas: (i) Institutional Training; (ii) Infrastructure; (iii) Convergence; (iv) Trainers; (v) Overseas Employment; (vi) Sustainable Livelihoods; and (vii) Leveraging Public Infrastructure.

National Policy on Skill Development and Entrepreneurship

The first National Policy on Skill Development (NPSD) was notified in 2009. The NPSD 2009 laid out the broad framework as well as objectives and outcomes for the skilling landscape in the country. Given the paradigm shift in the skilling ecosystem in the country and the experience gained through implementation of various skill development programmes in the country, there was an imminent need to revisit the earlier policy. Moreover, the 2009 policy itself provided for review every five years to align the policy framework with the emerging trends in the national and international milieu. Accordingly, the new National Policy on Skill Development and Entrepreneurship was notified in 2015 which replaced the policy of 2009.

The skill component of the policy addresses key issues in the skill landscape: low aspirational value, non-integration with formal education, lack of focus on outcomes, quality of training infrastructure and trainers, among others. The policy aims to align supply with demand, bridge existing skill gaps, promote industry engagement, operationalise a quality assurance framework, leverage technology and promote

apprenticeship to tackle the identified issues. It also aims to promote equitable skilling opportunities for socially/geographically marginalised and disadvantaged groups as well as women.

In the entrepreneurship domain, the policy seeks to promote an entrepreneurial culture through advocacy and integration of entrepreneurship education as a part of formal/skill education, enhance support for entrepreneurs in terms of credit and market linkages, foster innovation-driven and social enterprises and improve ease of doing business. It also suggests ways to further fillip entrepreneurship among women besides endeavouring to meet the entrepreneurial needs of socially/geographically marginalised and disadvantaged groups.

Schemes and Initiatives

Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

PMKVY is the flagship outcome-based skill training scheme of this Ministry. The objective of this skill certification and reward scheme is to enable and mobilise a large number of youth to take up outcome-based skill training to become employable and earn their livelihood.

The scheme was launched in 2015. The PMKVY is being implemented by the Centre along with the states.

Pradhan Mantri Kaushal Kendras (PMKK)

This Ministry, through National Skill Development Corporation (NSDC), implements Pradhan Mantri Kaushal Kendra (PMKK) Scheme for setting up of model skill centre in every district of the country while ensuring coverage of all the parliamentary constituencies.

The PMKK envisages to: create benchmark institutions that demonstrate aspirational value for competency-based skill development training at district level to ensure wider reach of programme; focus on elements of quality, sustainability and connect with stakeholders in skills delivery process; and transform from a mandate-driven footloose model to a sustainable institutional model.

National Skill Development Corporation

National Skill Development Corporation (NSDC) is a public private partnership firm set up by the Ministry of Finance, under Section 25 of the Companies Act, 1956. It has an equity base of ₹ 10 crore, of which

the government holds for 49 per cent, while the private sector has the balance 51 per cent. It aims to promote skill development by catalysing creation of large, quality, vocational institutions. NSDC is now under the aegis of the Ministry of Skill Development and Entrepreneurship (MSDE). NSDC provides funding to build scalable for-profit vocational training initiatives. Its mandate is also to enable support systems such as quality assurance, information systems and train the trainer academies either directly or through partnerships. NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organisations that provide skill training.

The main objectives of NSDC include: (i) to catalyse the creation of market-based, scalable business by providing funding through a combination of debt, equity and grants;(ii) implementing skills voucher programme; and (iii) promoting centres of excellence for training of trainers in coordination with states and SSCs, etc.

Schemes for Entrepreneurship

Pradhan Mantri Yuva Yojana

This Scheme aims at creating an enabling ecosystem for entrepreneurship promotion among youth through entrepreneurship education and training, advocacy, easy access to entrepreneurship support network and promotion of social entrepreneurship. The specific objectives of the scheme are as follows: (a) educate and equip potential and early stage entrepreneurs; (b) connect entrepreneurs through networks of peers, mentors, incubators, funding and business services; (c) support entrepreneurs through Entrepreneurship Hubs (E-Hubs); and (d) catalyse a culture shift to support aspiring entrepreneurs. The Scheme is being implemented in partnership with both public and private stakeholders.

Udaan

The Special Industry Initiative (SII) for Jammu and Kashmir is funded by Ministry of Home Affairs and implemented by National Skill Development Corporation. The programme is a part of the overall initiative for addressing economic issues in the UT and is focused on providing skills and job opportunities to the youth. Simultaneously, the

aim is also to provide exposure to corporate India towards the rich talent pool available there.

Entrepreneurship Development

For entrepreneurship promotion and mentoring of micro and small businesses, a scheme covering six major religious and holy townships, [i.e., (i) Puri (Odisha); (ii) Varanasi (Uttar Pradesh); (iii) Haridwar (Uttarakhand); (iv) Kollur (Karnataka); (v) Pandharpur (Maharashtra); and (vi) Bodh Gaya (Bihar)], was launched by the Ministry in November 2019. The objective of the project is to catalyse the entrepreneurial activities in the holy cities through resumption of existing livelihood activities by supporting the existing enterprises to scale-up and to tap the potential entrepreneurs for mentoring and handholding support for setting-up enterprises by them.

22 Mass Communication

THE Ministry of Information and Broadcasting, through the mass communication media consisting of radio, television, films, press and print publications, advertising and traditional modes of communication such as dance and drama, plays an effective role in helping people to have access to free flow of information. The Ministry is involved in catering to the entertainment needs of various age groups and focusing attention of the people on issues of national integrity, environmental protection, healthcare and family welfare, eradication of illiteracy and issues relating to women, children, minority and other disadvantaged sections of the society. The Ministry is divided into four wings, i.e., the Information Wing, the Broadcasting Wing, the Films Wing and the Integrated Finance Wing. The Ministry functions through its 21 media units/attached and subordinate offices, autonomous bodies and PSUs.

The Information Wing handles policy matters of the print and press media and publicity requirements of the government. This Wing also looks after the general administration of the Ministry.

The Broadcasting Wing handles matters relating to the electronic media and the regulation of the content of private TV channels as well as the programme matters of All India Radio and Doordarshan and operation of cable television and community radio, etc. Electronic Media Monitoring Centre (EMMC), which is a subordinate office, functions under the administrative control of this Division.

The Films Wing handles matters relating to the film sector. It is involved in the production and distribution of documentary films, development and promotional activities relating to the film industry including training, organisation of film festivals, import and export regulations, etc. The Integrated Finance Wing looks after the financial aspects of the Ministry.

Website : www.mib.gov.in

Prasar Bharati

Prasar Bharati (Broadcasting Corporation of India) is the public service broadcaster in the country, with Akashvani (All India Radio) and Doordarshan as its two constituents. It came into existence on November 23, 1997, with a mandate to organise and conduct public broadcasting services to inform, educate and entertain the public and to ensure a balanced development of broadcasting on radio and television.

Prasar Bharati is one of the largest broadcasting networks in the world. Historically, AIR and Doordarshan have played a catalytic role in nation's march towards development. The contributions made by both as development multipliers of a nascent nation in almost every sphere from agriculture, industrial growth to education, healthcare, immunisation, emancipation of women, strengthening of grassroots governance and democratisation process, are well recognised. In keeping with the demands of the times in the recent years, Prasar Bharati has embarked on a path to modernization and is increasingly adopting new and emerging technologies like digital terrestrial broadcasting, internet streaming, artificial intelligence, etc.

Content Innovation is a major area of thrust for both Doordarshan and AIR The top themes of content innovation have been synergy across radio and television, language amplification to address the wide diversity, accessibility and creating value from the rich archives. While focusing on its primary mission of public service broadcasting, popular content in new and innovative formats produced in collaboration with best in the industry has given a new fillip and boost to the entertainment quotient.

Objectives

The major objectives of the Prasar Bharati Corporation as laid out in the Prasar Bharati Act, 1990, are as follows: (i) to uphold the unity and integrity of the country and the values enshrined in the Constitution; (ii) to promote national integration; (iii) to safeguard citizens' rights to be informed on all matters of public interest and presenting a fair and balanced flow of information; (iv) to pay special attention to the fields of education and spread of literacy, agriculture, rural development, environment, health and family welfare and science and technology; (v) to create awareness about women's issues and to take special steps to protect the interests of children, the aged and other vulnerable sections of the society; (vi) to provide adequate coverage to the diverse cultures,

sports and games and youth affairs; (vii) to promote social justice, safeguard the rights of working classes, minorities and tribal communities; and (viii) to promote research and expand broadcasting facilities and development in broadcast technology.

Prasar Bharati Board

The Corporation is governed by the Prasar Bharati Board, which comprises a Chairman, an Executive Member (also known as Chief Executive Officer), a Member (Finance), a Member (Personnel), six part-time Members, a representative of the Ministry of Information & Broadcasting and Directors General of All India Radio and Doordarshan as ex-officio Members. The Chairman is a part-time member with a three-year tenure subject to an age limit of 70 years. The Executive Member is a whole time member with a five-year tenure subject to an age limit of 65 years. The Member (Finance) and the Member (Personnel) are whole time members also with a six-year tenure, subject to the age limit of 62 years. The Prasar Bharati Board meets from time to time and deliberates on important policy issues and gives directions to the executive to implement policy guidelines.

Website : www.prasarbharati.gov.in

All India Radio

After the invention of Radio and the starting of broadcasting in the western countries, broadcasting by private Radio Clubs started in a few cities in India like Mumbai, Kolkata and Chennai.

The first radio programme was broadcast by the Radio Club of Bombay in June 1923. It was followed by the setting up of a Broadcasting Service that began broadcasting on July 23, 1927 on an experimental basis at Mumbai and Kolkata simultaneously under an agreement between the Government of India and a private company called the Indian Broadcasting Company Ltd. When this company went into liquidation in 1930, Indian State Broadcasting Service under the Department of "Controller of Broadcasts" was constituted and in 1935 Lionel Fielden was appointed the Controller of Broadcasting in India. The Indian State Broadcasting Service was renamed as All India Radio in January 1936. It remained under Department of Communication, Department of l&B, Department of Information and Arts for periods

ranging from 1 to 4 years and finally has been under the Ministry of Information and Broadcasting. At the time of Partition, India had six radio stations (Delhi, Mumbai, Kolkata, Chennai, Tiruchirapalli and Lucknow) and three radio stations went to Pakistan (Lahore, Peshawar and Dacca, now in Bangladesh).

A 1,000 kw super power medium wave transmitter each was commissioned at Mogra near Kolkata in 1969 and at Rajkot in 1971. Four 500 kw super power short wave transmitters were inaugurated at Bangalore (now Bengaluru) in 1994. This made it one of the biggest transmitting centres in the world. The first ever FM service was started in Madras on July 23, 1977. All AIR stations were provided with 5 channel receiver terminals in 1985. Multitrack recording studio was commissioned at Mumbai in 1994 and in Chennai in 1995.

Infrastructure

All India Radio came to be known as Akashvani from 1957. AIR took over radio stations being run by native states since British days such as Akashvani Mysore, Hyderabad Radio, and Radio Kashmir, etc.

From a meagre 18 transmitters in 1947, AIR acquired 46 by the end of First Plan, 59 by the end of Second Plan, 110 by the end of Third Plan and 433 by the end of 11th Plan and by March 2019 total number of transmitters went up to 681, consisting of 136 MW, 48 SW and 497 FM transmitters. The number of radio stations went up from six in 1947 to 469 by March 2019.

Software

AIR has evolved, over the years, a three-tier system of broadcasting namely national, regional, and local. It caters to the information, education, and entertainment needs of the audience through its stations in this country of continental dimension with plural society. They provide news, music, spoken words, and other programmes in 23 languages and 176 dialects to almost the entire population of the country which crossed 1 billion mark recently.

The entertainment channel of AIR named Vividh Bharati was started on October 3, 1957 and since November 1, 1967, commercials were aired on this channel. The first Radio Sangeet Sammelan was organised in 1954, which has since become an annual feature. Akashvani Annual

Awards to promote excellence in Programme, Engineering, News and Audience Research were instituted in 1974. Doordarshan was separated from AIR on April 1, 1976. The first broadcast by political parties before elections went on air in 1977 from different stations of AIR. The North Eastern Service was commissioned on January 3, 1990 at Shillong in the campus of AIR, Shillong. The public service broadcasting initially in the evening transmission for about five and a half hour daily has since been extended to three transmissions. The programmes are beamed through a 50 kw SW transmitter in Hindi and English besides music programmes in different languages/dialects of all the states of the North East. Phone-in-Programmes were introduced.

Channels and Programmes

The phenomenal growth achieved by All India Radio through eight decades has made it one of the largest media organisations in the world. Now, it has 469 stations and 662 transmitters. To serve the communication needs of the plural society that India is, the network expanded gradually imbibing new technologies and programme production techniques. All India Radio's services are being digitalised.

Objectives

To provide information, education and entertainment, for promoting the welfare and happiness of the masses (*Bahujana Hitaya Bahujana Sukhaya),* All India Radio strives: (a) to uphold the unity of the country and the democratic values enshrined in the Constitution; (b) to present a fair and balanced flow of information of national, regional, local and international interest, including contrasting views, without advocating any opinion or ideology of its own; (c) to produce and transmit varied programmes designed to awaken, inform, enlighten, educate, entertain, and enrich all sections of the people; (d) to produce and transmit programmes relating to developmental activities in all their facets including extension work in agriculture, education, health and family welfare and science and technology; (e) to serve the rural, illiterate and underprivileged population, keeping in the mind the special needs and interest of the young, social and cultural minorities, the tribal population and those residing in border regions, backward or remote areas; (f) to serve the rural population, minority communities, women, children,

illiterate as well as other weaker and vulnerable sections of the society; and (g) to promote national integration.

Three-Tier Broadcasting

The three-tier system of broadcasting of AIR caters to the information, education, and entertainment needs of the audiences through its stations in this country of continental dimension and with a plural society. They provide news, music, spoken word and other programmes to almost the entire population of the country, 121.0 crore as per the 2011 Census. Its vast reach especially in the rural and tribal areas makes it the primary and sometimes the only source of information and entertainment.

In National Service the national programmes, which are heard on the Medium Wave in most parts of the country, cater to the first-tier broadcasting. Recently, it has started airing on Short Wave also. The regional and sub-regional stations provide the second-tier of broadcasting giving the programmes in the regional languages and promoting regional cultural facets. In addition, FM Channels at metros cater to the modern needs of the people primarily the youth. The Vividh Bharati has also been shifted to FM broadcasting system at 40 places. The 86 stations on FM mode set up to cater to the needs and tastes of the audiences of small towns in various parts of the country are the Local Radio stations (LRS). Recently, the community radio has become very popular among different electronic media available in the country. All India Radio has also set up Community Radio Service at five places in the North Eastern India as the voice of the local tribal population.

Regional Channels

Regional Channels are located mostly in the state capitals and in the major linguistic-cultural regions of every state. Altogether, 128 such channels are spread throughout the country. The public service broadcasting arm of AIR, the Regional Channels put out infotainment programmes with the objective of enriching the lives of their listeners. The Regional Channels, broadcast largely on the Medium Wave frequency, follow a composite programming mix. They also promote art and culture with a major emphasis on Indian classical music. Around 40 per cent of the total broadcast on primary channels comprises music, which includes classical, light, folk, film and the music of various other

languages. News and current affairs programmes constitute 20 to 30 per cent of the broadcast time. Radio plays and drama, health and family welfare programmes, programmes for women and children, farm and home programmes aimed at empowering rural masses are the other important segments of the primary channels. These channels being the most accessible of all the AIR channels, strive to reach their audiences in the language most understood by all.

Local Radio Stations

At present, 88 Local Radio Stations (LRS) are located across the country. These stations are serving the local population of the area, providing utility services and reaching right into the heart of the community.

FM Rainbow

FM Rainbow channel of All India Radio was launched at a time when radio listening was declining especially in big cities. FM radio filled this gap effectively by ensuring disturbance-free high quality music to its listeners. Even the presentation style of the compere on FM channel was transformed to suit the changing needs of listeners. Interpersonal chatting style of the comperes caught the pulse of youth and allured them to come closer to their radio. In its round-the-clock broadcast, the listeners were served with a recipe of whole new gamut of entertainment. Soon FM radio acquired the status of modern radio because it was speaking in their style and providing them the listening pleasure. The old glory of radio was restored once again at least in terms of listening percentages. AIR has 497 transmitters across the country. Of these, FM Rainbow is available at Delhi, Mumbai, Chennai, Kolkata, Bengaluru, Lucknow, Panaji, Jalandhar, Kanpur, Kochi, Puducherry, Shillong, Chandigarh, Kasauli, Cuttack, Kodaikanal, Tiruchirapalli, Coimbatore, Hyderabad, Vishakhapatnam, Raibareily, Jammu, Srinagar and Vijayawada.

FM Gold

FM Gold channel went on air on September 1, 2001, at Delhi as a niche infotainment channel with 30 per cent of news and current affairs component and 70 per cent of entertainment programming. At present, FM Gold channel is available daily round the clock. FM Gold channel is available at four metros: Delhi, Mumbai, Kolkata, Chennai; and Ludhiana. This additional channel gave its listeners an option to choose

between the two, besides listening to other parallel running AIR and private FM stations in the area. This channel provides information interlinked with entertainment and brings information updates on traffic, airlines, railways, weather, etc.

DTH Service

DTH Radio Channel is a satellite service meant for the listeners, who own a TV set. The service is available through the DTH platform of Prasar Bharati with uplinking facilities at Todapur, Delhi. It is not a terrestrial broadcast service and its programmes cannot be tuned in through the ordinary radio receiver sets. It is a 24-hour service broadcast digitally. The programming is planned in such a way that the repetitions are kept at a minimum.

The DTH Service provides 39 different language channels available in every nook and corner of the country. The most significant aspect of this broadcast is its digital quality.

Vividh Bharati

The popular Vividh Bharati Service provides entertainment for 17 hours a day from 41 CBS-VB centres. Besides this, Vividh Bharati Service is also relayed through 65 Local Radio Stations and 100 watt FM transmitters located across the country.

Website : www.allindiaradio.gov.in

News Services Division

The News Services Division (NSD) of All India Radio has been expanding its presence across various domains with the aim of reaching diverse cross-section of people. The News Services Division has substantially increased its presence on the social media and crossed major milestones in reaching out audiences far and wide.

NSD's 47 Regional News Units (RNUs) play a vital role to cater to the information needs of the people. RNUs make bulletins and programmes in 77 regional languages/dialects to make news region-specific and people-friendly. The RNUs originate 483 bulletins every day for a total duration of about 39 hours that includes regional, external, DTH services and FM headlines. RNUs also mount 1,087 news- based programmes in a

month for a total duration of nearly 147 hours besides broadcasting special programmes when state assemblies are in session.

FM headlines serve immediate needs of information in Indian languages for listeners during their daily busy schedule in cities and towns. At present 260 headline bulletins in 17 languages are being produced by RNUs.

Units of NSD

To facilitate the news gathering and broadcasting, NSD has various units, viz., the Reporting Unit, Talks and Current Affairs Unit, Reference Unit and the Monitoring Unit. With inputs from these units, NSD is able to cover diverse new events and happenings to present a comprehensive view of developments, flagship programmes and new initiatives of the current government like Swachh Bharat Abhiyan, Pradhan Mantri Jan-Dhan Yojana, etc. NSD is able to give wide coverage to Prime Minister's and President's visits/tours abroad.

Websites : www.newsonair.com

www.newsonair.nic.in

Mann Ki Baat

For Mann Ki Baat programme, live webcasting is done on website news. Special window and page is created for the purpose.

Transcription and Programme Exchange Service

AIR also has a Transcription and Programme Exchange Service which includes units like Central Archives, Sound Archives, Digital Sound Archives, Digital Library, Radio Autobiography, Transcription Unit and Refurbishing Unit.

Central Archives

The Transcription Service was started in April 1954, and entrusted with the main function of preparing transcription of speeches of all dignitaries with a special reference to the Presidents and Prime Ministers of India. This unit was also performing the duty of the processing of vinyl disc labelled "AIR-TS records" for preservation of recordings for future broadcast. The nomenclature of Service was changed to "Transcription and Programme Exchange Service" in 1959. As the processed records eventually proved to be uneconomical, the processing

work had to be closed down in 1967 and new modes of preservation like analogue magnetic tapes, etc., came into use.

Sound Archives

The Sound Archives of All India Radio can be called the National Audio Archives of the nation as it is the treasure house of precious recordings of music and spoken word in different categories. It is the largest audio library of Indian Music recordings. The library preserves a separate collection of Mahatma Gandhi's speeches including his first and the last prayer speeches recorded on May 11, 1947, at Sodepur Ashram, Calcutta and January 29, 1948, at Birla House, Delhi respectively. The only broadcast by Gandhi ji from AIR Delhi on November 12, 1947, is also preserved. The library contains recordings of all the Presidents and Prime Ministers of India. Voice recordings of eminent personalities like Rabindra Nath Tagore, Netaji Subhas Chandra Bose, Dr. B.R. Ambedkar, Sardar Patel, Sarojini Naidu etc., have also been preserved. Apart from this, award-winning radio dramas, features, documentaries and memorial lectures are available in the library.

Digital Sound Archives

Transcription and Programme Exchange Service (T&PES) has taken up a mega project of digitising all the analogue content. Major steps have been taken in this direction. Resultantly, Akashvani has become one of the major digital libraries in the broadcasting network with internationally accepted norms.

Archives Digital Library

Radio Autobiography

In Radio Autobiography, recordings of eminent personalities from various walks of life are preserved. The Central Archives of All India Radio is a rich repository of priceless recordings of Radio Autobiographies of renowned musicians, public figures, literatures etc. Among such eminent persons recorded are J. R. D. Tata, Ustad Ali Akbar Khan, Harivansh Rai Bachchan and Dr. Verghese Kurien. With the inputs from different AIR stations, the people of eminence are identified.

Programme Exchange Library

The main purpose of this unit is to exchange good quality programmes among the stations as per their requirements. In PEU Library approx. 8,000 tapes containing the recordings of music and spoken word programmes are preserved for this purpose. Besides containing both music and spoken word items in different Indian languages, PEU Library is also preserving the language lessons in Bangla, English, Gujarati, Kannada, Malayalam, Marathi, Odiya, Sanskrit, Tamil and Telugu.

Transcription Unit

One of the important functions of Transcription Unit is to transcribe the recording of speeches delivered by President and Prime Minister and preserve them in the form of volumes for posterity. Tapes containing the recording of speeches along with transcripts are received from various AIR stations. The bound volumes of all transcriptions are prepared and kept in the archives.

Refurbishing Unit

In order to refurbish the vintage music recordings in archives, Refurbishing Unit was installed some years ago with the assistance of United Nations Development Programme. Hundreds of hours of recordings of music and voices of Mahatma Gandhi, Pandit Nehru, etc., were refurbished here. As of now, this unit takes care of enhancing the audio quality of the recordings being released by AIR and Doordarshan archives.

External Services Division

The cardinal role played by international/external broadcasting as an instrument of foreign policy and public diplomacy needs no elaboration. Due to its colonial link with England, broadcasting came almost simultaneously in England and India. Similarly, soon after BBC started its first foreign language broadcast in Arabic in 1938, All India Radio entered the domain of external broadcast on October 1, 1939 purely as a tool for propaganda for the Allies during the World War II with a service in Pushto to counter the German Radio Blitzkrieg in the region and supplement the efforts by the BBC in this part of the world. At the dawn of Independence, External Services Division (ESD) had to don a new avatar as the voice of an emerging nation, an old civilisation, a tool for diplomacy and also effective propaganda machinery at the time of

different crises. Since then the External Services Division of AIR has been a vital link between India and rest of the world, specially with those countries where the interest of India are intertwined because of Indian population staying in those countries.

External Services Division of AIR ranks high among the external radio networks of the world both in its reach and range covering about 100 countries in 27 languages. The AIR, through its external broadcasts, aims to keep the overseas listeners in touch with the ethos of India. The languages in which AIR reaches its foreign audience are English, French, Russian, Swahili, Arabic, Persian, Pushto, Dari, Baluchi, Sinhalese, Nepali, Tibetan, Chinese, Thai, Burmese, and Bhasha Indonesia. The services in Hindi, Tamil, Telugu, Malayalam and Gujarati are directed at overseas Indians, while those in Urdu, Punjabi, Sindhi, Saraiki, Kannada and Bengali are meant for listeners in the Indian sub-continent.

National Academy of Broadcasting and Multimeda

National Academy of Broadcasting and Multimedia (NABM) (Programme) hitherto known as Staff Training Institute (Programme) is the apex training institute of Prasar Bharati. It is responsible for training of in-service Programme and Administrative personnel working at various stations of AIR and Doordarshan.

Social Media Cell

AIR's Social Media Cell is an extension of the on-ground work in the ever-expanding network. Apart from regularly highlighting important activities and broadcasts of AIR, this Cell also extensively promotes the policies of government.

Audience Research Unit

With the changing mass communication scenario, Audience Research has occupied the centrestage. World over, almost all the big media organisations have been doing in-house audience research in one form or the other or 'Market Research' in marketing parlance as no media organisation can afford to put their scarce resource at stake without

knowing the potential audience (consumers) and market for their media content.

All India Radio has been the pioneer in this field. It has a wide network of Audience Research Units across the country operational since 1946. It provides programme feedback to programme producers to plan, design, and modify the programmes according to the needs, tastes, and aspiration of the target audience.

Doordarshan

From an experimental service begun at Delhi in September 1959, Doordarshan (DD) over the years has grown tremendously to become one of the leading TV organisations of the world. Over the years, it has not only expanded its network throughout length and breadth of the country but also kept pace with new technological developments in the field of TV broadcasting. Doordarshan is presently operating 34 satellite channels and has a vast network of 67 studios and 1,416 transmitters of varying power providing TV coverage to about 92 per cent population of the country. In addition, it is providing free-to-air DTH service.

Doordarshan has 7 national channels, 1 English news channel, and 20 regional language satellite services channels. Its present bouquet contains 161 channels (38 DD channels, 2 Parliamentary channels,51 co-branded educational channels, 2 foreign public broadcasting channels and remaining private C&S GEC, movie, news and music channels) and 48 radio channels. Currently being available in 38 million households, it is the largest DTH platform in the country. The News On Air App available on both Android and iOS platforms provides live streaming of AIR and DD channels.

Doordarshan is headed by the Director General who is responsible for policy formation; planning and development; infrastructure and technology development; budgetary planning and control; human resource development; overseeing operation and maintenance activities, etc. Four zonal offices located at Delhi, Mumbai, Kolkata and Chennai look after project and maintenance activities in their responsive zone. The various Doordarshan establishments are—Doordarshan Kendras (Studio Centres), High Power Transmitters (HPTs), Low Power

Transmitters (LPTs) and Very Low Power Transmitters (VLPTs). Maintenance centres look after clusters of LPTs and VLPTs.

DD National

DD National Channel, a public service broadcaster is the largest terrestrial network in the world. It covers about 92.0 per cent population and 81.0 per cent land area of the country. Being a Public Service Broadcaster the channel continues to make significant contribution to accelerate socio-economic changes; promote national integration; inculcate a sense of unity and fraternity; and stimulate scientific temperament among the people. It contributes to dissemination of knowledge/education and information for public awareness about means of population control; family welfare; preservation of environment; ecological balance; and measures for women and children welfare. The channel lends a healthy mix of entertainment, information and education. The service is available in terrestrial mode from 05.30 A.M. till midnight. In the satellite mode it is available round-the-clock.

DD News

DD News is the only terrestrial-cum-satellite, multilingual news channel of the country. The news channel has been successfully discharging its responsibility to give balanced, fair and accurate news without sensationalising as well as by carrying different shades of opinion. DD News channel was launched in November 2003 by converting DD-Metro into a 24-hour news channel. Its satellite footprint is available across the country. DD News terrestrial reach is 49 per cent area of the country. It is currently producing news content in Hindi, English, Urdu and Sanskrit languages. Over 18 hours of Live transmission include telecast of more than 40 news bulletins in these languages. DD News is having 31 Regional News Units (RNUs) across the country which are broadcasting news bulletins.

DD India

Doordarshan opened its windows to the world by launching its international channel on March 14, 1995. The channel, initially known as DD-World was renamed DD India in 2002. The programming offers

international viewers an update on the Indian social, cultural, political and economic scene.

DD Bharati

DD Bharati channel was re-launched in 2012 as a niche channel for art and culture to preserve Indian culture and heritage with authenticity and to present it to the wider public. It is the only channel dedicated to art and culture in India. DD Bharati has entered into partnerships with various national and international public institutions and NGOs to acquire premiere programmes available in their archives, after making very judicious selection keeping the profile and audience of the channel in view.

DD Urdu

DD Urdu came into existence in 2006 which became 24x7 channel with effect from 2007. The transmission features a mix of repeat and non-repeat, acquired and in-house software, which encapsulates heritage, culture, literature, information, education and social issues specific to the target audience apart from news, live events like Independence Day, Republic Day celebrations, messages of the President and Prime Minister, special programmes on the state leaders. Mandate/the theme that predominantly runs through the transmission relates to modernising educational and social outlook of the target audience.

DD Sports

Sports Channel of Doordarshan was launched in 1999. The transmission of the channel is round-the-clock from 2000.

DD Kashir

DD Kashir channel was launched in 2000 with fourteen and a half hours of transmission per day. This was converted into a 24-hour channel a year later.

Doordarshan Commercial Service

Doordarshan Commercial Service (DCS) is an independent wing to co-ordinate all the commercial activities being performed at the

headquarters, Doordarshan Kendras, marketing divisions and DCD towards sale of airtime as well as collection of revenue from agencies/clients/producers. It is responsible for framing of commercial policies and updating of rate card as per inputs received from marketing divisions and regional Kendras, with the approval of Prasar Bharati Board.

DD Archives

Doordarshan Archives re-invented itself in 2003 with a new approach and prepared itself to meet the challenges of Audio Visual Digital World.

Audience Research

The Audience Research Unit of Doordarshan, with its 19 field units located with Doordarshan Kendras all over the country, is involved in research studies on various aspects of broadcasting since 1976.

Website : www.doordarshan.gov.in

Electronic Media Monitoring Centre

Protecting the citizens from undesirable content being aired by television channels is a norm followed by almost all leading democracies in the world. In India, Electronic Media Monitoring Centre (EMMC) is entrusted with the task of monitoring the content being aired by TV channels. EMMC is among one of the premier organisations of the world that monitor the broadcasting sector and the content being aired by broadcasters. The Centre is also one of the youngest among the government-owned media units in the country.

It is worth recalling that the need to monitor content arises in response to grievances and complaints coming from different quarters against invasion of raunchy reality shows, talk shows, news, documentaries and soap operas into the television industry.

EMMC records and monitors the content of around 600 channels, beaming over the Indian territory, so that any violations of codes framed under the Cable Television Networks (Regulation) Act, 1995, could be checked. Cable Television Networks (Regulation) Act, 1995 identifies several codes which must be adhered to by all broadcasting entities. The revised up-linking guidelines and downlinking guidelines for channels

beamed at Indian viewers also require monitoring of content for possible violations and remedial measures thereto.

Electronic Media Monitoring Centre identifies topical matters of immense public importance and reports them to the Ministry for evaluation and for taking any action, if needed. EMMC also prepares and submits special reports to the Ministry on topics desired by the government. Setting up examples of success, the EMMC has taken a big leap forward by starting Radio Monitoring since January 1, 2015. The newly started wing of EMMC is currently monitoring Community Radio Stations (CRSs) for detection of possible violations. At present, 30 Community Radio Stations from across the country are being monitored to check whether they are airing any content that violates the 'General Agreement between Government of India and Community Radio Stations (GOPA)' and 'Programme and Advertisement Code of All India Radio'. In a very short span of time, several apparent violations have been detected in the content being broadcast by CRSs and submitted before the Ministry by EMMC. These apparent violations not only include obscene and vulgar programmes but several other types of content too which violate general rules laid by the Ministry.

Because of the ever-increasing number of channels, there is a race among channels to attract as many eyeballs as possible, and this trend has resulted in most of the channels treading on a very thin line and often barging into grey area. The somewhat callous attitude of TV channels towards the regulatory guidelines is becoming a matter of concern, particularly when an average Indian family, increasingly finds itself sitting in front of the TV for a time longer than ever before. The change in trend of TV viewing is also due to the fact that television industry has grown immensely over the past few years. Television shows have evolved over the years as more and more TV shows resort to unwarranted content to capture their audience. It has been observed that some of the TV shows affect young viewers and it is becoming a problem. Television influences the lives of young children in a big way. Children are exposed to all sorts of violence and anomalous culture at home. Public interest obligation is missed by mass media when they air programmes.

Advertisement sector is a key part of Indian television industry. With the rising influence of TV media on people, it has become a catalyst of

consumerism. The scope of creativity is enormous in the field of advertising. People like advertisements because they provide information and create awareness about new products in the market. Our decisions, whether to buy a product or not, are often completely influenced by the promotional activities of the companies concerned. Therefore, due to unfair trade practices, deceptive advertisements and widespread adverse impact of the advertisements of unhealthy products like tobacco and liquor, the Government of India has always endeavoured to curb or at least restrict advertisements of such products by bringing in appropriate legislations, orders and directives. As a reaction to the government's directive to ban advertisements of products that are adverse to health, the major companies of liquor and tobacco have taken the route of "Surrogate Advertisements". These advertisements are bombarded on viewers lest they forget the liquor and tobacco brands as there is a ban on directly advertising them.

The advent of the "Era of Reality Shows", in the Indian TV industry, has generated fairly good TRP for many a TV channels. Nowadays, when every second TV channel is coming up with its own version of the "reality programmes based on borrowed ideas and values", it is very much imperative for the government to ensure that the 'Freedom of Expression' is not misused to play with the young minds of our country. Such shows have a greater impact on children than other regular TV programmes as they interpret real life situations. Reality shows are meant for adults, and without proper knowledge, understanding, and guidance, children can be misled by such programmes. Some reality shows have children as participants who are under tremendous pressure to perform. Also, children who are left to watch these shows on television can often be baffled at the display and can take them as behaviour expected out of everyone, especially themselves and their peers.

A large number of misleading advertisements make unsubstantiated claims about the impact of certain products. Ministry of l&B has cautioned that advertisements should not dwell on a product's seemingly miraculous properties that cannot be proven. This is in violation of the Advertising Code, particularly rule 7(5) contained in the Cable Television Networks Rules framed under the Cable Television Networks (Regulation) Act, 1995.

Website : www.emmc.gov.in

Press and Print Media

Registrar of Newspapers for India

The Office of the Registrar of Newspapers for India (RNI) is an attached office of the Ministry of Information and Broadcasting. Under its statutory and derivative functions, it verifies and approves titles of newspapers, registers them, checks and establishes circulation claims. It also submits to the Secretary, I & B, by 31st December every year, the "Press in India Report", highlighting the state of Print Media in the country; the report is subsequently published under the title "Press in India". Under its non-statutory functions, the RNI issues Eligibility Certificates for import of newsprint, to actual users which are registered with RNI as well as Essentiality Certificates for import of printing machinery, etc.

Title Verification

RNI receives applications of the intending publishers for title verification, duly forwarded by the District Magistrate (DM) concerned and processes them for title verification as per the proviso to Section 6 of the PRB Act. During 2015, RNI scrutinised 15,293 applications, for verification of titles, of which 9,272 titles were verified. To facilitate the applicants RNI has started online application filling facility on its website. For further processing by the DM concerned, the applicant is required to take out a printout of the filled application and submit to DM concerned for forwarding to RNI. The applicants are intimated through SMS and e-mail at application receipt stage and title verification stage at RNI to facilitate the applicants and ensure transparency. The status of title applications can be checked on RNI website. Discrepancy letters and title verification letters can also be downloaded from RNI website.

De-Blocking of Titles

After getting the title verified, the publishers are required to get the title registered. If the documents for registration are not received in RNI in 2 years, the title gets de-blocked and is available for verification to any intending applicant.

Registration

After the title verification, publisher is required to submit a declaration duly authenticated by the District Magistrate concerned, along with a copy of the first issue published within specified days after authentication of declaration as per the Act and an affidavit for no-foreign tie-up. After ascertaining that the publication has been printed and published in conformity with the various provisions of the PRB Act and the rules made thereunder, a registration number is allotted to the newspaper/periodical and entries made in the Register of RNI. The Certificate of Registration (CR) is then issued to the publisher.

Annual Statement

As per Section 19D of the Press and Registration of Books Act, 1867 an Annual Statement in Form-ll prescribed in the Registration of Newspapers (Central) Rules 1956 is required to be submitted by the publishers of newspapers to the Press Registrar on or before the last day of May each year containing various information as prescribed under the rules. It is also obligatory on the part of every publisher to print in the publication, a statement indicating the ownership and other relevant particulars in Form IV in the first issue every year after the last day of February. Annual Statement is the basic document on the basis of which RNI undertakes compilation and analysis of the status of the Press, which is incorporated in its Annual Report, called "Press in India".

Website : www.rni.nic.in

Press Information Bureau

The Press Information Bureau (PIB) is the nodal agency of the Government of India to disseminate information to the print, electronic and social media on government policies, programmes, initiatives and achievements. It functions as an interface between the government and the media and also provides feedback to the government on the reaction of people as reflected in the media. It has 5 zones comprising 19 regional offices and 17 branch offices, including an Information Centre. PIB disseminates information through different means such as press releases, press notes, feature articles, backgrounds, press briefings, interviews, press conferences and press tours, etc., to cater to the needs of regional media. PIB also uses social media platforms like Twitter, Facebook, Instagram to disseminate information. The information is released in

English, Hindi, Urdu along with 13 other regional languages which reaches newspapers and media organisations all over the country. PIB also provides accreditation facility to media persons so as to facilitate access to information from the government sources.

Publicity

Departmental Publicity Officers are attached to various ministries and departments for disseminating information to the media through press releases, press notes, backgrounders etc., and also by arranging press conferences, press tours, media briefings etc. These officers provide the requisite service to their respective ministries and also meet the information needs of media in respect of those ministries.

Prime Minister's Unit

PM's Publicity and Reference Unit is a dedicated unit for the publicity and media support for the Prime Minister's Office and cabinet. The media related compilations prepared by this Unit include daily newspaper clippings highlighting major issues, weekly magazine reports, feedback reports from social media and online media portals and special compendium of press coverage on PM visits.

Social Media

PIB has social media presence on Twitter, Facebook, YouTube and Instagram. The information about various events/activities/programmes of ministries and departments is put out on social media for immediate and wider dissemination. Special infographics, video messages, etc., are created and posted on social media for special events such as budget presentation, Yoga Day, Independence Day, etc. Many regional/branch offices of PIB also have their dedicated social media platforms.

Twitter: On Twitter, PIB's handle, @pibindia and @pibhindi have nearly 2.1 million+ followers and 1,90,000+ followers respectively.

Facebook: PIB's Facebook page, www.facebook.com/pibindia has reached 430K+subscribers.

Instagram: PIB's Instagram gallery, www.instagram.com/pibindia has reached 703K+subscribers.

Fact Check Unit

The government set up the Fact Check Unit under Ministry 'of Information and Broadcasting, staffed by two officers of Indian

Information Service and soft launched it in 2019. The Unit, to combat misinformation, fake news and carry out fact check of stories on social media, maintains a bilingual presence on Twitter, Facebook and Instagram. It takes into account any complaint on email, WhatsApp, or through website complaint portal. The Unit also takes suo-motu cognisance of instances of fake news circulating on various social media platforms in the form of text, audio clip, video clip or an image. Similarly, a dedicated Covid-19 Fact Check Unit is also working to counter Covid-19 related fake news.

Media Interactive Sessions

Media Interactive Sessions are planned in selected state capitals on issues such as socio-economic development, infrastructure, developmental schemes, etc. Under this initiative, important Union Ministries and senior officers of the concerned ministries are invited to participate in the event and interact with the national and local media and highlight the important initiatives taken by the government. 'Vartalap' is a programme organised for small towns/rural journalists to keep them aware/updated about the various central government flagship schemes for the welfare of rural populace. Press Tours are conducted by the headquarters/regional and branch offices with a view to showcase the success stories of the various schemes/projects being run by the government in rural/urban areas throughout the country.

Online Press Accreditation

Press Accreditation is granted to media representatives including members of the foreign media at the headquarters of Press Information Bureau, New Delhi. A fully online system of press accreditation was operationalised in 2010 which is continually updated to keep up with the increasing number of requests for accreditation.

journalists' Welfare Scheme

A scheme of providing financial assistance to journalists and their families facing acute financial hardship on account of serious ailment is being implemented by PIB which provides for one-time ex-gratia relief on urgent basis. The amount of such assistance, up to ₹ 5 lakhs, is extended to the families of deceased journalist or in case of his permanent disability. Assistance up to ₹ 3 lakhs is also extended in case

of ailments like cancer, renal failure, heart ailments, etc., and up to ₹ 2 lakhs in case of accidents requirement hospitalisation.

Emergency Control Room

The PIB has a News Room/Control Room which is operational round the year to meet challenges emerging out of any eventuality during any time of the day or night. Arrangements for holding press conferences at short notices and simultaneous web-cast through PIB centres across the country are also kept in a state of readiness to handle any sudden development and unexpected situation even after 9.00 p.m. The Control Room functions on 24x7 basis during emergencies and times of crisis.

Feedback, Feature and Photo Services

One of the important functions of PIB is to keep the government informed of public perception about government policies and programmes as reflected in media. The feedback reports include inputs from the national dailies published from the capital, from regional language newspapers as sent by the regional/branch offices, inputs from TV news channels, web media and magazines.

The Bureau also provides inputs regarding media trends on important matters relating to their ministries/departments. The Feature Unit of the Bureau issue features, success stories backgrounders, info-nuggets and photo-features, which are also sent to the regional/branch offices for translation and circulation to the local media.

International Film Festival of India

The Press Information Bureau was part of the IFFI 2017 to facilitate dissemination of Festival related information to media at the venue in Goa. It provided favourable and encouraging work environment and facilitated participation of the media persons in the Festival.

During the Festival, a media centre is set up at the venue to extend facilities like special accreditation, hospitality arrangements, work room with computers and internet, telephone, newspapers, etc., to journalists. PIB also arranges and conducts the press conferences of the much acclaimed directors, actors, experts from the international film fraternity attending the annual event.

Website : www.pib.gov.in

News Agencies

Press Trust of India

India's largest news agency, Press Trust of India (PTI), is a non-profit sharing cooperative owned by the country's newspapers with a mandate to provide efficient and unbiased news to all subscribers. Founded in August 1947, PTI began functioning from 1949. It offers its news services in English and Hindi languages. Bhasha is the Hindi language news service of the agency. PTI subscribers include 500 newspapers in India and scores abroad. All major TV and radio channels in India and several abroad, including BBC in London, receive its services. PTI now has its own satellite delivery system through a transponder on an INSAT satellite for reaching its services directly to subscribers anywhere in the country. Increasingly, more and more subscribers are opting for satellite reception. Photo service is delivered by satellite as well as accessed by dial-up.

PTI has also begun satellite transmission by Ku Band which offers subscribers the option of receiving news through a cheaper and small size satellite receiver. The Agency is on the internet too. The agency's news services have been showcased on its website http.//www.ptinews.com. Clients also have the option of taking any of PTI's services through internet. PTI news is also available through World Space radio broadcast reception. The Photo Service is delivered by satellite as well as accessed through dial-up. The agency is now engaged in archiving its photos. It employs more than 400 journalists and 500 stringers to cover almost every district and small town in India. Collectively, they put out more than 2,000 stories and 200 photographs a day.

Its correspondents are also based in leading capitals and important business and administrative centres around the world. It also has exchange arrangements with several foreign news agencies to magnify its global news footprint. Currently, PTI commands 90 per cent of news agency market share in India. Besides the news and photo services, the other services of the agency include mailer packages of feature, science service, economic service and Data India, and screen-based services as News-scan and stock scan. A television wing, PTI-TV, does features and undertakes corporate documentaries on assignment basis. The PTI has arrangements with the Associated Press (AP) and Agency France Press

(AFP) for distribution of their news in India. AP's photo and international commercial information are also distributed in the country through PTI.

Website : www.ptinews.com

United News of India

United News of India (UNI) was incorporated under the Companies Act, 1956, in December 1959 and started functioning effectively from 1961. In the past five decades, UNI has grown into a major news organisation in India and, with its vibrant presence, provided the much-needed spirit of competition in the vital areas of news gathering and dissemination. It also has a full-fledged Hindi wire service 'UNIVARTA' since 1982 and a Photo Service and a Graphics Service in the same decade. In June 1992, it launched the first ever wire service in Urdu. UNI's Photo Service distributes about 200 pictures every day, including 60 international photographs from EPA, the European Pressphoto Agency and Reuters. Its Graphics' Service distributes five or six graphics every day.

Website : www.uniindia.com

Press Council of India

The Press Council of India is a statutory quasi-judicial autonomous authority mandated by the Parliament for the twin objectives of preserving the freedom of the press and maintaining and improving the standards of newspapers and the news agencies in India exercising equal quasi-judicial functions over the authorities as well the press person. It comprises a Chairman and 28 members. While the Chairman has, by convention, been a sitting or retired judge of the Supreme Court of India, of the 28 members, 20 represent various segments of the Press and eight overseeing the readers' interest, are representatives of the two Houses of Parliament (3 Lok Sabha and 2 Rajya Sabha) and premier literary and legal bodies of the country i.e., University Grants Commission, Bar Council of India and Sahitya Akademi. The Council has its own funds for performance of its functions under the Act that comprises the fee collected from newspapers, other receipts and also grants-in-aid from the central government.

The Press Council has the responsibility to preserve the freedom of the press and to maintain and improve the standards of newspapers and

news agencies in the country. There is also an advisory role on the Council in that it can, either suo-motu or on a reference made to it by the government under Section 13(2) of the Act, undertake studies and express its opinion in regard to any bill, legislation, law or other matters concerning the press and convey its opinion to the government or the persons concerned. Also, in the matters of public importance concerning its statutory responsibilities, the Council may suo-moto take an on-the-spot inquiry.

The Council discharges its functions primarily through adjudications on complaint cases received by it, either against the press for violation of journalistic ethics or by the press for interference with its freedom. Where the Council is satisfied, after inquiry, that a newspaper or a news agency has offended the standards of journalistic ethics or public taste or that an editor or working journalist has committed any professional misconduct, the Council may warn, admonish or censure them or disapprove of their conduct. It is also empowered to make such observations as it may think fit in respect of the conduct of any authority, including the government, for interfering with the freedom of the press so prescribed under Section(4). The decisions of the Council are final and cannot be questioned in any court of law.

Press and Registration Appellate Board

Section 8C of the Press and Registration of Books Act, 1867, entrusts to the Press Council, the Appellate Jurisdiction over the Magisterial Orders of non-authentication of a Declaration under Section 6 or its subsequent cancellation under Section 8B of the said Act. The Board consists of a Chairman and another member to be nominated by the Press Council of India among its members.

National Press Day

The National Press Day is celebrated annually on November 16 as a symbol of a free and responsible press in the country.

Website : www.presscouncil.nic.in

New Media Wing

Set up in 1945, the Research, Reference and Training Division now renamed as “New Media Wing” functions as information unit for the

Ministry of Information and Broadcasting. It provides background, reference and research material for use of the Ministry, its media units and others engaged in mass communication.

Social Media

Since its inception in 2012, the Social Media Cell of Ministry of Information and Broadcasting performs various activities to reach out to the last mile. The Ministry is active on all major social media platforms and has built a strong relationship with the audience. Social media interactions in various formats such as Talkathon and Facebook Live are organised regularly to enable direct communication between ministers, senior officers and general public. On Twitter, the official handle of the Ministry, @MIB_lndia has 1.2M followers. The Facebook page of the Ministry, @inbministry has 1.3M followers. Recently, the Ministry started a Twitter handle in Hindi, @MIB_Hindi to reach out to the Hindi speaking population on social media space.

India-A Reference Annual

The Division compiles a reference book, 'India-A Reference Annual', on development and progress made by central ministries/departments, states/ union territory administrations and PSUs/autonomous bodies. It is simultaneously published in Hindi, titled 'Bharat'.

Photo Division

Photo Division, an independent media unit meant for the visual support of the varied activities of the Government of India, is a subordinate office of the Ministry of Information and Broadcasting and the biggest production unit of its kind in the country in the field of photography. Photo Division was established in late 1959 as a culmination of the government's decision for establishing a separate department keeping in view the importance of the medium, as the photograph gives the most authentic and truthful record as well as recognise the new medium for right projection, create the archival record under the professional experts. This was done with integrating the photo studios of the Publications Division and the Photo Unit of the Press Information Bureau and the then DAVP with a view of eliminating the duplication of the activities. The Division produces photographic visuals of achievements and activities of Government of India for internal and

external publicity as well as other purposes. In its 50 years, the Division has a collection of nearly 10 lakhs images in its archive. On the occasion of completion of 50 years of its existence in 2010, the Division introduced National Photography Awards to promote nation's art, culture, development, heritage, history, life, people, society, traditions etc., and to encourage professional and amateur photographers from all corners of the country. The Division has its own official website for the photo publicity of the official assignments. It is also in the process of selling the photographs through e-commerce gateway.

Synergy with other Media Units

To keep synergy between the other Media Units, the Division has taken up various measures. It has launched its official website to explore the global utility of around 8-10 lakh archival and current images. The Division is in progress of introducing e-commerce feature for the sell/buy of images through the official website. A high-capacity server is installed for the online/offline retrieval of archival images. The News Photo Network of the Division has been functioning on complete digital mode to avoid the delay in sending photographs to newspapers and Press Information Bureau. The Division provides facility to DAVP for the supply of life size digital inkjet images for the exhibition purpose.

Modernisation of Photo Division

Efforts have been made to enhance the quality of services of the Division by upgrading equipment like large format InkJet photo printers for life size prints for exhibitions, special digital photo printer for making back-to-back prints for VVIP album. Further, a high-capacity server has been installed for archiving, indexing, cataloguing and retrieving 8-10 lakh images.

National Photography Awards

On the occasion of completion of 50 years in 2010, the Photo Division introduced National Photography Awards to encourage professional and amateur photographers of the country. This also promotes documentation of the country's rich heritage, art and culture. The Division has presented 11 life time achievement awards to renowned photographers.

Website : www.photodivision.gov.in

Publications Division

Publications Division, a repository of books and journals highlighting subjects of national importance and India's rich cultural heritage, was established in 1941. It has emerged as a premier publishing house of the Government of India, enriching national knowledge repository in: (i) preserving and showcasing India's heritage with quality publications of land and people, history of freedom movement, art and culture, flora and fauna, biographies of the builders of modern India during the freedom movement, leading lights in the field of culture, philosophy, science, literature, etc.; (ii) chronicling the contemporary with bringing out speeches of the Presidents/Prime Ministers, books on contemporary science, economy, history and other subjects with underlying focus on Indian society and readership; and (iii) bringing out children's literature.

It is among the premier publishing organisations of the Government of India involved in production, sale and distribution of popular books and journals on matters of national importance. The Division publishes books and journals on diverse aspects of Indian panorama, ranging from art and culture; biographies of the Builders of Modern India; cultural leaders of India; life and works of other prominent Indian personalities from different walks of life; India's history; and freedom struggle among many other subjects.

The Division has published several books on Gandhian thoughts including the Collected Works of Mahatma Gandhi (CWMG) in 100 volumes, in English and Sampoorna Gandhi Vangmaya in Hindi which is considered to be the most comprehensive and authentic collection of Gandhi ji's writings. Publications Division, in collaboration with Gujarat Vidyapith, and under supervision of prominent Gandhian scholars, has also prepared the e-version of the Collected Works of Mahatma Gandhi (e-CWMG), fully searchable master copy, in the form of a well-designed set of DVDs. The print version of CWMG based on the master copy has also been reprinted under guidance of an Experts' Panel. Publications Division has also been engaged in restoring and reprinting several heritage publications in partnership with National Gandhi Museum.

Journals

Besides books, the Publications Division also publishes 18 monthly journals, which include *Yojana* in English, Hindi and 11 other languages; *Aajkal* (Hindi and Urdu); *Bal Bharati* (Hindi); *Kurukshetra* (English and

Hindi); and a weekly journal *Employment News* (English, Hindi and Urdu). Its journals have a large readership and enjoy a high degree of credibility. These journals reflect the initiatives of the government and the country's progress in different areas, covering a wide range of subjects such as economic development, rural reconstruction, community development, literature, culture, children's literature and information on employment and career opportunities. The journals can be subscribed online, details of which are available on its website.

Employment News/Rozgar Samachar is a weekly journal, released every Saturday, and is published simultaneously in Hindi, English and Urdu. Launched in 1976, the weekly carries advertisements for job vacancies as advertised by central and state governments, public sector undertakings, autonomous bodies, universities, admission notices for professional courses, examination notices and results of organisations like UPSC, SSC and other general recruitment bodies.

e-version of Rozgar Samachar: Rozgar Samachar, a corresponding version of *Employment News* (English), is a prominent job journal in Hindi providing information about job opportunities in central government including public sector enterprises. It also provides information and guidance about admission and career opportunities in various streams through career-oriented articles by experts. The e-Rozgar Samachar will provide the journal in digital form and is available @ ₹ 400 for yearly subscription.

Mobile App "Digital DPD": It is available for free download on Google Play Store and will facilitate reading about DPD books and easy purchasing. The Mobile App is synced with the Digital Rights Management System to keep a check on piracy and is integrated with the Bharatkosh payment gateway for the ease of payments.

Redesigned Dynamic Website: The newly revamped dynamic website of DPD (www.publicationsdivision.nic.in) with an integrated payment gateway is capable of providing real-time purchase facilities as well as updated information about Publications Division's books and journals. All books are available on the website for sale via payment gateway of Bharatkosh. This user-friendly website has an attractive look and feel and is easily accessible through Social Media tools.

Creation of Digital Archives and e-books: Publications Division has undertaken an important task of digitisation of its publications with a purpose to preserve and promote the same and is also making e-books of selected saleable titles. The digital archives is made to preserve the archival value books. Since 2015, the Reference Annuals *India* and *Bharat* are digitised and converted into fully searchable and downloadable e-books for use on a variety of electronic devices.

Online sale of books and journals: DPD has also developed a portal to sell its printed journals online through Bharatkosh (www.bharatkosh.gov.in) payment gateway developed in collaboration with Controller General of Accounts (CGA), Ministry of Finance.

Computerisation of Inventory and other Business operations : The entire business process of Publications Division including inventory management, payment of royalty, sales, accounts, subscribers management, networking with the Sales Emporia have been computerised, which enables the website to sell printed books as well as e-books through its Digital Rights Management platform.

The Division has dedicated websites www.publications division.nic.in, www.yojana.gov.in for Yojana and http://employmentnews.gov.in for Employment News.

Publications Division also has presence on facebook at https://www.facebook.com/publications division and on Twitter at www.twitter.com @DPD_lndia.

Business and Distribution Network

The sales and distribution of books and periodicals published by Publications Division is undertaken through its headquarters in Soochna Bhawan and offices at Delhi Secretariat, Mumbai, Chennai, Kolkata, Patna, Lucknow, Hyderabad and Thiruvananthapuram.

Website : www.publicationsdivision.nic.in

Films Division

The story of the Films Division is synchronous with the eventful years of the country since Independence and over the last several years, the Division has been motivating the broadest spectrum of the Indian public with a view to enlisting their active participation in nation-building

activities. The aims and objectives of the Division, focused on national perspectives, are to educate and motivate people in the implementation of national programmes and to project the image of the land and the heritage of the country to Indian and foreign audiences. The Division also aims at fostering the growth of the documentary film movement, which is of immense significance for the country in the information, communication and integration. Films Division produces documentaries, short films, animation films and news magazines. It caters to nearly 4,000 cinema theatres all over the country and also to the non-theatrical circuits like units of the Directorate of Field Publicity, Doordarshan, educational institutions, film societies and voluntary organisations. The documentaries and newsreels of state governments are also featured in the Division's release on the theatrical circuit. This Division also sells prints, stock shots, DVDs/ VCDs and distribution rights of documentaries and feature films in India and abroad. Apart from production of films, Films Division also gives on hire, its recording theatre, editing rooms and other fine equipment to film makers.

Archival Research Centre

Archival Research Centre (ARC), a multi-station research facility by Films Division was opened in 2013. The aim of this facility is to share the enormous wealth of visual history and visual documentation that Films Division has accumulated since its conception. The ARC makes the entire archive of Films Division available to the 15 research stations presently routed to it. The Films Division archive will be available to these 15 stations for viewing and research purposes.

International Documentary Film Festival

Since 1990, Films Division organises the biennial Mumbai International Film Festival for Documentary, Short and Animation Films (MIFF). It provides a unique opportunity for film makers, producers, distributors, exhibitors and film critics to meet and exchange ideas and concepts.

National Museum of Indian Cinema

The concept of National Museum of Indian Cinema (NMIC) is a unique idea to be pursued for the first time in the history of Indian Cinema. In the last 100 years of Indian Cinema, lot of historical material suitable for the film museum has been destroyed, damaged or not taken

care of properly due to lack of restoration and preservation facilities of this kind. The Film Museum will not only provide a storehouse of information to the laymen but it will also help film makers, film students, enthusiasts and critics to know the development of cinema as a medium of artistic expression not only in the country but in all parts of the world, as there is no Film Museum in India.

National Film Development Corporation Limited

The National Film Development Corporation Limited (NFDC), incorporated in 1975 (100 per cent owned GOI body), was formed by the Government of India with the primary objective of planning and promoting an organised, efficient, and integrated development of the Indian film industry. NFDC was re-incorporated in the year 1980, by merging the Film Finance Corporation (FFC) and Indian Motion Picture Export Corporation (IMPEC) with NFDC.

The erstwhile Film Finance Corporation (FFC) was set up in 1964, with the primary objective of extending finance to young talented film makers for film production, whereas, the Indian Motion Picture Export Corporation (IMPEC), an autonomous body, was set up to regulate the import and export of films and canalisation of new stock into the country. In recognition of the need for a body that could facilitate the growth of the Indian film industry, the Government of India merged the FFC and IMPEC and NFDC. The NFDC has so far funded/ produced over 200 films. These films, in various Indian languages, have been widely acclaimed and have won many national and international awards. The Corporation has its corporate office at Mumbai along with three regional offices situated at Chennai, Kolkata, and Delhi and a branch office at Thiruvananthapuram.

Website : www.nfdcindia.com

Central Board of Film Certification

Central Board of Film Certification (CBFC) is a statutory body under Ministry of Information and Broadcasting, regulating the public exhibition of films under the provisions of the Cinematograph Act, 1952.

Films can be publicity exhibited in India only after they have been certified by the Central Board of Film Certification. Though the first film in India (*Raja Harishchandra)* was produced in 1913 by Dadasaheb Phalke, the Indian Cinematograph Act was passed and came into effect only in 1920. Censor Boards (as they were called then) were placed under police chiefs in cities of Madras, Bombay, Calcutta, Lahore and Rangoon. Regional censors were independent. After Independence, autonomy of regional censors was absolished and they were brought under the Bombay Board of Film Censors. With implementation of Cinematograph Act, 1952, the board was unified and re-constituted as the Central Board of Film Censors.

Cinematograph (Certification) Rules were revised in 1983 and since then the Central Board of Film Censors became known as the Central Board of Film Certification. The Board consists of non-official members and a chairman (all of whom are appointed by the central government) and functions with headquarters at Mumbai. It has nine regional offices, one each at Mumbai, Kolkata, Chennai, Bengaluru, Thiruvananthapuram, Hyderabad, New Delhi, Cuttack and Guwahati. The regional offices are assisted in the examination of films by Advisory Panels. The members of the panels are nominated by the central government by drawing people from different walks of life for a period of 2 years.

The certification process is in accordance with the Cinamatograph Act, 1952, the Cinematograph (Certification) Rules, 1983, and the guidelines issued by the central government u/s 5(b). Initially, there were only two grading, U and A. In 1983, two more ratings were introduced, i.e., UA and S. UA means it can be unrestricted public exhibition but with a word of caution that children below 12 years of age will require the parental guidance, the S category is only for special class of persons like doctors, etc.

Website : www.cbfcindia.gov.in

Directorate of Film Festivals

The Directorate of Film Festivals (DFF) was set up in 1973 with the prime objective of promoting good cinema. This is undertaken by organising a range of activities under these broad categories: (a) the International Film Festival of India; (b) the National Film Awards and

the Dadasaheb Phalke Award; (c) cultural exchange programme and organising screening of Indian films through the missions abroad; (d) the selection of Indian Panorama; (e) participation in international film festivals abroad; (f) special film expositions on behalf of the Government of India; and (g) print collection and documentation.

These activities provide a unique platform for exchange of ideas, culture and experiences between India and other countries in the field of cinema. It also provides a powerful platform for Indian cinema and fosters commercial opportunities for Indian films. Within the country, the latest trends in global cinema are made accessible to the general public, film industry and students.

International Film Festival of India

The 50th International Film Festival of India (IFFI) was held from November 20 to 28, 2019. It witnessed more than 200 acclaimed films from 76 countries, with Russia as the country of focus. It also included 26 feature films and 15 non-feature films in Indian panorama section. The nine-day long festival of quality cinema concluded with the Indian premiere of Italian film 'Marghe and Her Mother'. Various prestigious awards including Golden Peacock, Silver Peacock, Lifetime Achievement Award were conferred during the festival.

Website : www.iffigoa.org

National Film Awards

The National Film Awards, the highest awards in the field of cinema continue to underline cinematic excellence. The National Awards along with cinema's highest honour, the Dadasaheb Phalke Award, are presented by the President of India. To commemorate the release of the first Indian Feature Film, Raja Harishchandra on May 3, 1913, it has been decided to confer the National Film Awards on 3rd May of every year.

67th National Film Awards

The 67th National Film Awards ceremony was supposed to be held on May 3, 2020 but was postponed indefinitely due to Covid-19 pandemic. The DFF invited online entries for Feature and Non-Feature Films certified by the Central Board of Film Certification (CBFC) between January 1, 2019, and December 31, 2019. For this section, films in any Indian language, shot on 16 mm, 35 mm, a wider film gauge or a digital

format, and released in cinemas, on video or digital formats for home viewing were eligible. Films were required to be certified as a feature film, a featurette or a documentary/newsreel/non-fiction by the CBFC. Books, critical studies, reviews or articles on cinema published in Indian newspapers, magazines, and journals between January 1, 2019, and December 31, 2019, were eligible for the best writing on cinema section. Entries of dubbed, revised or copied versions of a film or translation, abridgements, edited or annotated works and reprints were ineligible for the awards.

National Film Archive of India

The importance of preserving cinema as an art and historical document has been recognised all over the world. The task of preserving cinema in all its varied expressions and forms is best entrusted to a national organisation having a permanent set-up and the confidence of the film industry and adequate resources and expertise. Thus, the National Film Archive of India (NFAI) was established as a media unit in February 1964, with the following aims and objectives: to trace, acquire and preserve for posterity the heritage of national cinema and build up a representative collection of world cinema; to classify and document data related to film, undertake and encourage research on cinema and publish and distribute them; to act as a centre for dissemination of films culture in the country; and to ensure the cultural presence of Indian cinema abroad.

Film Storage/Preservation

NFAI houses nearly 27 state-of-the-art film preservation facilities/vaults with global standards and specifications. These vaults have the capacity of nearly 2 lakh film reels storage. The film vaults are maintained with following temperatures for black and white films, colour films and nitrate based films:

Type of films	*Temperatures*	*Relative Humidity*
Nitrate Films	10°-12° C	40 per cent
Black & White films	10°-12° C	40 to 50 per cent
Colour films	2°-4° C	30 per cent

Film Appreciation Course

An important activity under dissemination of film culture is screen education scheme which includes long and short term film appreciation courses, conducted in collaboration with various educational and cultural institutions across the country.

Supply of Films

NFAI's activities to disseminate film culture in the country are manifold. Its Distribution Library has about 25 active film club/ members throughout the country. The Archive supplies films for various screening programmes and film festivals across India.

National Film Heritage Mission

National Film Heritage Mission (NFHM), a prestigious mission of Government of India project was set up in November 2014, for restoring and preserving the film hertiage of India. This initiative will be greatly appreciated by the film industry. This new plan scheme has taken care of digitisation/restoration of films available with NFAI.

Objectives of NFHM include: (i) to undertake film condition assessment of the film collection and to ascertain the left over life of the film; (ii) preventive conservation of 1,32,000 film reels; (iii) 2k/4k picture and sound restoration of 1,086 landmark feature films and 1,152 shorts of Indian Cinema and recording of new picture and sound inter-negatives of each film; (iv) digitisation of 1,160 feature films and 1,660 shorts; (v) construction of archival and preservation facilities for preservation of material restored under NFHM in dust free, low humidity, and low temperature conditions at NFAI campus, Pune; and (vi) training workshops and courses in field of conservation, preservation and archiving in co-ordination with international agencies that are experts in this field.

Children's Film Society of India

Children's Film Society of India (CFSI), which started functioning in 1955 as an autonomous body under Ministry of Information and Broadcasting, is mandated to produce children's film and exhibit and create and nurture a dynamic child's culture in the country with a purpose of stimulating their creativity, compassion and critical thinking. CFSI has

produced, exhibited and distributed films, serials, animations and documentaries that entertain and encourage children to reflect upon the world around them. With an enviable catalogue of over 260 films in 15 different languages, CFSI remains the prime producer of children's films in the country. Several of these films have won prestigious national and international awards.

CFSI films provide a value-based edutainment to a large number of children through the art form called cinema. These films are not only bearing entertainment value but there are lots of take-away messages in them which include: Dreams aren't impossible when the desire is strong; respect elders; tribals are also the citizens of our country and we must respect them; family is above all and do all to save its each member; hard work not miracles pay you off; social bonding through games; love flora and fauna; don't be ashamed of any physical disability; children also can contribute to nation building; national unity, etc.

Film Production

An opportunity to prospective filmmakers to make children's film in any genre or duration in 23 Indian languages, is funded by CFSI. It also undertakes dubbing, subtitling and even purchasing of award winning foreign films.

Participation in National/International Film Festivals

CFSI films participate and win acclaim in various renowned National/ International Film Festivals and have won several prestigious national and international awards.

Website : www.cfsiindia.org

Bureau of Outreach and Communication

Bureau of Outreach and Communication (BOC) was created in 2017 by integrating erstwhile Directorate of Advertising and Visual Publicity (DAVP), Directorate of Field Publicity (DFP) and Song & Drama Division (S&DD) at national, zonal, regional and field levels and converting them into three separate divisions under the overarching BOC, in order to streamline government's outreach communication in order to have mass reach with specific focus on media dark areas, rural areas and on communicating with people in the form and language understood by

them, using different vehicles of communication, viz., print media advertising, audio visual advertising, outdoor publicity, exhibitions, etc. Advertising and Visual Communication Division (erstwhile DAVP) is the nodal division of BOC which undertakes campaigns on behalf of various ministries and departments of Government of India, public sector undertakings and autonomous bodies to inform and educate rural and urban people about the government's policies and programmes through its various vehicles of communication. Folk Communication Division of BOC aims to propagate policies, programmes and schemes of the government and to create awareness and emotional receptivity among the general public regarding social, economic and democratic ideals conducive to the progress of the nation through interpersonal communication through live media.

Field Communication Division (FCD) of BOC is mandated to undertake direct communication and interpersonal communication programmes to create awareness amongst the masses, particularly in rural areas about the government policies, programmes and schemes for their development through interactive sessions with local opinion leaders and targeted beneficiaries, group discussions, door-to-door visits, public meetings in villages and semi-urban areas. Special outreach programmes are organised with the support of various stakeholders, viz., the state government and local functionaries, society groups, etc. As they are in the local language and at nearby venues, the impact of these communication programmes enables and encourages a greater understanding of the government's schemes and behaviour change. These efforts are complemented by use of traditional and folk media and other conventional and non-conventional methods. FCD's field functionaries also collect feedback on implementation of government's programmes/schemes for the benefit of implementing agencies. Bureau of Outreach and Communication, with its headquarters at New Delhi, consists of 23 Regional Outreach Bureaus (ROBs) and 148 Field Outreach Bureaus (FOBs).

Website : www.davp.nic.in

Film and Television Institute of India

The Film and Television Institute of India (FTII) was set up in 1960. Following the addition of Television Wing in 1974, the Institute was re-designated as Film and Television Institute of India. The Institute became a Society in October 1974, under the Registration of Societies Act, 1860. The Society consists of eminent personalities connected with film, television, communication, culture, alumni of institute and ex-officio government members. The Institute is governed by a Governing Council, headed by a Chairman. The academic policies and plans of the Institute are formulated by the Academic Council. The matters involving finance are controlled by the Standing Finance Committee. The Institute consists of two Wings—The Film Wing and the TV Wing—and offers courses in both film and television. The three-year diploma courses lead to a postgraduate diploma in film direction, cinematography, audiography and film editing. The Institute also offers a two-year postgraduate diploma course in acting, a two-year postgraduate course in art direction and production design, and one-year post graduate certificate course.

Film and Television Institute of India provides the latest education and technological experience in the art and technique of film-making and television production. In-service training is provided to officers of all grades of the Doordarshan and others. It is equipped with the latest digital and broadcast grade production set-ups, viz., Non Linear; beta cam and A/B roll editing setups; digital cameras viz. Sony BVP-500 P; Soft Chroma Keyer; digital special effect generator; silicon graphics 02 workstations with Alias software; modern movie cameras; rerecording equipment; etc., which provide an excellent exposure to the faculty and students of Film and Television Institute of India.

Designed for a new generation of storytellers, as well as visual and performing artists, FTII takes pride in the talent that it attracts from all corners of the country. Students from diverse backgrounds are encouraged to join the full-time, hands-on, intensive academic programmes in various aspects of film and television. Small class sizes ensure individual attention and extensive interaction among students and instructors. Collaborative exercises and projects prepare them to become professionals in their respective fields. In addition, celebrities and renowned professionals from the film, television, and media industries frequently visit FTII to share their knowledge and experience with students. In May 2017, FTII rolled out Skilling India in Film and

Television (SKIFT), a film education outreach initiative under which various short courses are being conducted throughout the country in association with state/UT governments, universities and educational institutes, to promote cinema education thereby providing quality cinema literacy, which is affordable and accessible to the masses. In May 2020, FTII introduced online film education through two new verticals—FTII Online and Vijay Tendulkar Writers' Academy.

FTII is a permanent member of Centre International de Liaison des Ecoles de Cinema et de Television (CILECT), an International Association of Film Schools, which includes over 149 audio-visual educational institutions from 60 countries across 6 continents. In addition, FTII also collaborates with many renowned film, TV and media schools all over the world—La Femis, France; FABW and IFS Cologne, Germany; Griffith Film School, Australia— and conducts student exchange programmes every year. FTII publishes a biannual journal, "Lensight", initially a technical journal for celluloid and electronic media professionals, launched in 1991, it is now an accredited academic journal. It has earned excellent goodwill amongst technicians and other media professionals. FTII, which includes the erstwhile Prabhat studio, houses artefacts, original contracts and partnership deeds of Prabhat Film Company in addition to costumes, properties, equipment, posters and stills of archival value in its museum space which is open for public visits.

Website : www.ftii.ac.in

Satyajit Ray Film and Television Institute

Satyajit Ray Film and Television Institute (SRFTI), Kolkata, was established as an autonomous educational institution and was registered under the West Bengal Societies Registration Act, 1961. Located at Kolkata and named after the legendary film maestro Satyajit Ray, SRFTI is the second national level film training institute to be established by the Government of India. The institute offers three-year postgraduate diploma courses in direction and screenplay writing, cinematography, editing and audiography. Apart from the basic diploma course, the Institute also has the provision to conduct short and medium term courses on areas related to film and television. Research and explorative

studies in sociology, culture and technology of film and television are the other areas of focus in SRFTI.

Presently, the Institute conducts a three-year postgraduate programme in cinema, offering specialisation in six disciplines: (a) direction and screenplay writing; (b) editing; (c) cinematography; (d) sound recording and design; (e) producing for film and television; and (f) animation cinema and a two-year postgraduate programme in electronic and digital media.

Apart from the 12 regular PG programmes, the Institute also conducts short courses on film appreciation, acting for the screen, library science, digital editing, etc. It also runs a temporary campus at Itanagar, Arunachal Pradesh where it is conducting a 10-week programme.

SRFTI is run by a Society constituted by the Government of India. The Society runs the Institute through a Governing Council that is constituted with select members of Society. The Governing Council is the supreme body for all executive functions of the Institute. It also constitutes different committees/ bodies as deemed necessary, viz., Academic Council, Standing Finance Committee, etc.

Website : www.srfti.ac.in

Indian Institute of Mass Communication

The Indian Institute of Mass Communication (IIMC), registered as a society under the Societies Registration Act, 1860, came into existence in 1965. The Institute was established with the basic objective of undertaking teaching, training and research in the area of mass communication.

The Institute conducts a number of postgraduate diploma courses in print journalism, radio and TV journalism and advertising and public relations. Beginning in 1969, the Institute has organised a postgraduate diploma course in development journalism for middle level working journalists form Asian, African, Latin American and East European countries under the auspices of the Ministry of External Affairs. A number of specialised short-term courses ranging from one week to twelve weeks are also organised to meet the ever-growing training needs of communication professionals working in various media/publicity outfits of central/state governments and public sector organisations. The

Institute also collaborates with different national and international agencies in conducting training programmes, seminars, workshops, etc. and in undertaking research projects.

IIMC endeavours to contribute towards the creation and strengthening of an information structure suitable not only for India requirements, but also those of other developing countries. It provides its expertise and consultancy services to other institutions/organs of the central/ state governments, public sector organisations, universities and other academic institutions. With the growing popularity of the Institute's training activities and with a view to meeting regional aspirations, the Institute opened a branch at Dhenkanal, Odisha, in 1993 for catering to the demands of the eastern region.

At present, the branch conducts two postgraduate diploma courses—Journalism (English) and Journalism (Odia). The Government of India, through the Ministry of Information and Broadcasting, makes financial support to the Institute available. The activities of the Institute are guided by its Executive Council, whose Chairman (Ex Officio) is the Secretary in the Ministry who is also the President of the Institute (Society). The other members of the Council include, interalia, representatives of the Institute's faculty and eminent personalities from the media. Through its continuous hard work over the last more than four decades of its existence and excellent delivery mechanism, the Institute has achieved the envious position of a "Centre of Excellence" in the area of communication teaching, training and research.

Teaching and Training Programmes

The academic and training activities of the Institute can be divided into the following programmes: postgraduate diploma programmes for students: These comprise four programmes in journalism and one in advertising and public relations: (i) postgraduate diploma course in journalism-English; (ii) post-graduate diploma course in journalism-Hindi; (iii) postgraduate diploma course in journalism-Oriya; (iv) postgraduate diploma course in radio and TV journalism-English and Hindi; and (v) postgraduate diploma course in advertising and public relations-English and Hindi.

This four-month diploma course is highly sought after by mid career level working journalists in Africa, Asia and Latin America and other

developing countries. The average intake of participants is 20-25 per batch. The Institute organises two such courses every year.

Short-term Courses, Workshops, Seminars and Conferences

With a view to contributing towards better understanding of different issues pertaining to mass communication in the context of India and other developing countries and in order to increase awareness about the emerging techniques and sharpening their basic skills, the Institute has been organising a variety of short-term courses, workshops, seminars and conferences in various areas of communication and media. The Institute runs regular short-term academic programmes for personnel of different media units of the Ministry of Information and Broadcasting. A number of specialised short-term courses, ranging from one week to 12 weeks' duration, are also conducted for meeting the professional training needs of defence officials and those working in various media/publicity organisations of the central/state governments and Public Sector Enterprises.

Website : www.iimc.nic.in

Broadcast Engineering Consultants India Limited

Broadcast Engineering Consultants India Ltd. (BECIL), a profit making PSE, was constituted in 1995 to provide the national broadcasters' expertise to the private broadcasters in the country. At present, BECIL is an established consultancy agency, system integrator and turnkey solution provider in all spheres of Broadcast Engineering. BECIL also undertakes operation and maintenance of various types of broadcast systems. Its clients include government, semi-government, overseas and private organisations.

The area of specialisation of BECIL is as follows: establishment of radio and TV transmitting facility including frequency and coverage planning, prediction etc.; setting up state-of-the-art studio facilities for audio and video including ethernet connectivity capable of transmitting live content and data; establishment of cable TV systems and HITs (Head End In The Sky) and wireline broadcasting; turnkey solution for establishing community radio stations; establishment from concept to commissioning of electronic media monitoring solutions (Radio and TV Terrestrial or Satellite), and security related Surveillance Set ups for

GSM, CDMA and VSAT; sales and support for all type of broadcast engineering equipment/system; design and integration of outside broadcast vans (DSNG) with state-of-the- art technology; providing professionals for O&M of broadcast stations, TV studios, satellite earth stations, Electronic Media Monitoring Centre and supply; and support for various type of monitoring, interception and encryption, decryption devices for forces and intelligence agencies.

BECIL client list includes government, semi-government, overseas and private organisations. It has many firsts to its credit like establishment of first teleport in India, first to establish infrastructure, first to set up multi-channel FM transmission in India combining up to 7 FM channels at Bengaluru, first to design and establish HDTV studio set-up for Presidential Secretariat and Lok Sabha TV, to name a few.

Website : www.becil.com

23 Planning

PLANNING in India derives its objectives and social premises from the Directive Principles of State Policy enshrined in the Constitution. Public and private sectors are viewed as complementary. The private sector covers, besides organised industry, small-scale industries, agriculture, trade and housing, construction and related areas. Individual efforts and private initiatives are considered necessary and desirable in the national endeavour for development with optimum voluntary cooperation.

NITI Aayog

The National Institution for Transforming India (NITI Aayog) came into existence in 2015 replacing the Planning Commission which was established in 1950. The NITI Aayog is the successor to the Planning Commission. The new institution is envisaged to be a catalyst to the developmental process, nurturing an overall enabling environment-through a holistic approach to development-going beyond the limited sphere of the public sector and Government of India. This is to be built on the foundation of: an empowered role of states as equal partners in national development; operationalising the principle of cooperative federalism; a knowledge hub of internal as well as external resources; serving as repository of good governance best practices, and a think tank offering domain knowledge as well as strategic expertise to all levels of government; a collaborative platform facilitating implementation; by monitoring progress, plugging gaps and bringing together the various ministries at the centre and in states, in the joint pursuit of developmental goals.

The National Institution for Transforming India or NITI Aayog was created to serve as the think tank of the Government of India. The Prime Minister of India serves as the Chairperson of the institution. The institution plays a leadership role in policymaking in the central government; works closely with state governments; serves as a

knowledge hub; and monitors progress in the implementation of policies and programmes of the Government of India. The institution provides the central and state governments with relevant strategic and technical advice across the spectrum on key policy elements. These include: matters of national and international importance on the economic front; dissemination of best practices from within the country and from other nations; and the infusion of new policy ideas and specific issue-based support. Through consultative and other mechanisms, it endeavours to inform of the best practices developed in one or more states or in other parts of the world to all states for possible adoption. It fosters cooperative federalism through structured support and policy guidance to the states on a continuous basis.

The institution designs strategic and long-term policy and programme frameworks and initiatives and monitors their progress and their efficacy regularly. It uses the lessons learnt from monitoring and feedback to make innovative improvements, including necessary mid-course corrections. Also, NITI Aayog actively monitors and evaluates the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the prospects of success of the latter. The Aayog publishes policy research papers on contemporary issues, brings out books on best practices, prepares model laws to help states reform their policies and organises workshops and conferences. For providing directional and policy inputs, it serves as a repository of research on good governance and helps disseminate this research to stakeholders.

Composition

The composition of the NITI Aayog is as follows:

Prime Minister of India is the Chairperson. The Governing Council comprises the Chief Ministers of all the states, Chief Ministers of union territories with legislatures, viz., Delhi and Puducherry and Lt. Governors of other union territories. Experts, specialists and practitioners with relevant domain knowledge as special invitees are nominated by the Prime Minister. The full-time organisational framework will consist of, in addition to the Prime Minister as Chairperson, a Vice-Chairperson that is to be appointed by the Prime Minister. Full-time and part-time members will be maximum of 2, from leading universities, research

organisations and other relevant institutions in an ex-officio capacity. Part-time members will be on a rotational basis. Ex-officio members will be maximum of 4 members of the Union Council of Ministers to be nominated by the Prime Minister. Chief Executive Officer is to be appointed by the Prime Minister for a fixed tenure, in the rank of Secretary to the Government of India/Secretariat, as deemed necessary.

Website: www.niti.gov.in

Erstwhile Planning Commission

The Planning Commission was set up in March 1950, in pursuance of declared objectives of the government to promote a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country, increasing production and offering opportunities to all for employment in the service of the community. It was charged with the responsibility of making assessment of all resources of the country augmenting deficient resources, formulating plan for the most effective and balanced utilisation of resources and determining priorities. Jawaharlal Nehru was the first chairman of the Planning Commission.

First Plan

Keeping in view the large-scale import of foodgrains in 1951 and inflationary pressures on the economy, the First Plan (1951 -56) accorded the highest priority to agriculture including irrigation and power projects. About 44.6 per cent of the total outlay of ₹ 2,069 crore in the public sector (later raised to ₹ 2,378 crore) was allocated for this purpose. The Plan aimed at increasing the rate of investment from 5 to about 7 per cent of the national income.

Second Plan

The Second Five-Year Plan (1956-57 to 1960-61) sought to promote a pattern of development, which would ultimately lead to the establishment of a socialistic pattern of society in India. Its main aims were: (i) an increase of 25 per cent in the national income; (ii) rapid industrialisation with particular emphasis on the development of basic and heavy industries; (iii) large expansion of employment opportunities; and (iv)

reduction of inequalities in income and wealth and a more even distribution of economic power. The Plan aimed at increasing the rate of investment from about 7 per cent of the national income to 11 per cent by 1960-61. It laid emphasis on industrialisation, increased production of iron and steel, heavy chemicals including nitrogenous fertilisers and development of heavy engineering and machine building industry.

Third Plan

The Third Plan (1961-62 to 1965-66) was aimed at securing a marked advance towards self-sustaining growth. Its immediate objectives were to: (i) secure an increase in the national income of over 5 per cent per annum and at the same time ensure a pattern of investment which could sustain this rate of growth in the subsequent Plan periods; (ii) achieve self-sufficiency in foodgrains and increase agricultural production to meet the requirements of industry and exports; (iii) expand basic industries like steel, chemicals, fuel and power and establish machine building capacity so that the requirements of further industrialisation could be met within a period of about 10 years mainly from the country's own resources; (iv) fully utilise the manpower resources of the country and ensure a substantial expansion in employment opportunities; and (v) establish progressively greater equality of opportunity and bring about reduction in disparities of income and wealth and a more even distribution of economic power. The Plan aimed at increasing the national income by about 30 per cent from ₹ 14,500 crore in 1960-61 to about ₹ 19,000 crore by 1965-66 (at 1960-61 prices) and per capita income by about 17 per cent from 330 to 386 over the same period.

Annual Plans

The situation created by the Indo-Pakistan conflict in 1965, two successive years of severe drought, devaluation of the currency, general rise in prices and erosion of resources available for Plan purposes delayed the finalisation of the Fourth Five Year Plan. Instead, between 1966 and 1969, three Annual Plans were formulated within the framework of the draft outline of the Fourth Plan.

Fourth Plan

The Fourth Plan (1969-74) aimed at accelerating the tempo of development of reducing fluctuations in agricultural production as well as the impact of uncertainties of foreign aid. It sought to raise the standard of living through programmes designed to promote equality and social justice. The Plan laid particular emphasis on improving the conditions of the less privileged and weaker sections especially through provision of employment and education. Efforts were directed towards reduction of concentration of wealth, income and economic power to promote equity. The Plan aimed at increasing the net domestic product (at 1968-69 factor cost) from ₹ 29,071 crore in 1969-70 to ₹ 38,306 crore in 1973-74. The average annual compound rate of growth envisaged was 5.7 per cent.

Fifth Plan

The Fifth Plan (1974-79) was formulated against the backdrop of severe inflationary pressures. The major objectives of the plan were to achieve self-reliance and adopt measures for raising the consumption standard of people living below the poverty line. This Plan also gave high priority to bring inflation under control and to achieve stability in the economic situation. It targeted an annual growth rate of 5.5 per cent in the national income. Four Annual Plans pertaining to the Fifth Plan period were completed. It was subsequently decided to end the Fifth Plan period with the close of the Annual Plan 1978-79.

Sixth Plan

Removal of poverty was the foremost objective of the Sixth Plan (1980-85). The strategy adopted was to move simultaneously towards strengthening the infrastructure for both agriculture and industry. Stress was laid on tackling inter-related problems through a systematic approach with greater management, efficiency and intensive monitoring in all sectors and active involvement of people in formulating specific schemes of development at the local level and securing their speedy and effective implementation. The actual expenditure in the Sixth Plan stood at ₹ 1,09,291.7 crore (current price) as against the envisaged total public sector outlay of ₹ 97,500 crore (1979-80 prices) accounting for a 12 per

cent increase in nominal terms. The average annual growth rate targeted for the Plan was 5.2 per cent.

Seventh Plan

The Seventh Plan (1985-90) emphasised policies and programmes, which aimed at rapid growth in foodgrain production, increased employment opportunities and productivity within the framework of basic tenets of planning, namely, growth, modernisation, self-reliance and social justice. Foodgrain production during the Seventh Plan grew by 3.23 per cent as compared to a long-term growth rate of 2.68 per cent between 1967-68 and 1988-89 and the growth rate of 2.55 per cent in the eighties due to overall favourable weather conditions, implementation of various thrust programmes and concerted efforts of the government and the farmers. To reduce unemployment and consequently, the incidence of poverty, special programmes like Jawahar Rozgar Yojana were launched in addition to the existing programmes. Due recognition was accorded to the role, small-scale and food processing industries could play in this regard. The total expenditure during the entire Seventh Plan stood at ₹ 2,18,729.62 crore (current prices) as against the envisaged total public sector outlay of ₹ 1,80,000 crore, resulting in a 21.52 per cent increase in nominal terms. During this Plan period, the Gross Domestic Product (GDP) grew at an average rate of 5.8 per cent exceeding the targeted growth rate by 0.8 per cent.

Eighth Annual Plans

The Eighth Five-Year Plan could not take off due to the fast-changing political situation at the Centre. The Eighth Five-Year Plan commenced in 1992 and that 1990-91 and 1991 -92 were treated as separate Annual Plans. Formulated within the framework of the Approach to the Eighth Five-Year Plan (1990-95), the basic thrust of these Annual Plans was on maximisation of employment and social transformation.

Eighth Plan

The Eighth Five-Year Plan (1990-95) was launched immediately after the initiation of structural adjustment policies and macro stabilisation

policies, which were necessitated by the worsening Balance of Payments position and the position of inflation during 1990-91. The various structural adjustment policies were introduced gradually so that the economy could be pushed to a higher growth path and improve its strength and thus prevent a crisis in Balance of Payments and inflation in the future. The Eighth Plan took note of some of these policy changes, which were to come about due to these reforms. The Plan aimed at an average annual growth rate of 5.6 per cent and an average industrial growth rate of about 7.5 per cent. These growth targets were planned to be achieved with relative price stability and substantial improvement in the country's Balance of Payments. Some of the salient features of economic performance during the Eighth Five-Year Plan indicate, among other things: (a) a faster economic growth; (b) a faster growth of the manufacturing sector and agriculture and allied sectors; and (c) significant growth rates in exports and imports, improvement in trade and current account deficit and a significant reduction in the central government's fiscal deficit. However, a shortfall in expenditure in the central sector due to inadequate mobilisation of internal and extrabudgetary resources by the PSUs and various departments was witnessed. In the states' sector, there was a lack of mobilisation of adequate resources due to deterioration in the balance of current revenues; erosion in the contribution of state electricity boards and state road transport corporations; negative opening balance; mounting non-Plan expenditure; and shortfalls in the collection of small savings, etc. The total expenditure during the entire Eighth Plan stood at ₹ 4,95,669 crore by taking 1996-97 (RE) as actual] at current prices as against envisaged total public sector outlay of ₹ 4,34,100 crore (1991-92 prices), resulting in a 14.2 per cent increase in nominal terms. The Eighth Plan envisaged an annual average growth rate of 5.6 per cent. Against this, an average annual growth rate of 6.8 per cent was achieved during this plan period.

Ninth Plan

The Ninth Plan (1997-2002) was launched in the 50th year of India's Independence. The Plan aimed at achieving a targeted GDP growth rate of 7 per cent per annum and there was emphasis on the seven identified

Basic Minimum Services (BMS) with additional Central Assistance earmarked for these services with a view to obtaining a complete coverage of the population in a time-bound manner. These included provision of safe drinking water; availability of primary health service facilities; universalisation of primary education; public housing assistance to shelterless poor families; nutritional support to children; connectivity of all villages and habitations; and streamlining of the public distribution system with a focus on the poor. The Plan also aimed at pursuing a policy of fiscal consolidation, whereby the focus was on sharp reduction in the revenue deficit of the government, including the centre, states and PSUs through a combination of improved revenue collections and control of inessential expenditures, particularly with regard to subsidies and through recovery of user charges and decentralisation of planning and implementation through greater reliance on states and Panchayati Raj Institutions.

The specific objectives of the Ninth Plan included: (i) priority to agriculture and rural development with a view to generate adequate productive employment and eradication of poverty; (ii) accelerating the growth rate of the economy with stable prices; (iii) ensuring food and nutritional security for all, particularly the vulnerable sections of society; (iv) providing the basic minimum services of safe drinking water, primary healthcare facilities, universal primary education, shelter, and connectivity to all in a time-bound manner; (v) containing the growth rate of population; (vi) ensuring mobilisation and participation of people at all levels; (vii) empowerment of women and socially disadvantaged groups such as Scheduled Castes, Scheduled Tribes and Other Backward Classes and minorities as agents of socio-economic change and development; (viii) promoting and developing people's participatory institutions like Panchayati Raj Institutions, cooperatives and self-help groups; and (ix) strengthening efforts to build self-reliance. The Ninth Plan envisaged an average target growth rate of 6.5 per cent per annum in GDP as against the growth rate of 7 per cent approved earlier in the Approach Paper. The scaling down of the target was necessitated by the changes in the national as well as global economic situation in the first two years of the Ninth Plan. Against this, the achievement in the growth-rate on an average was to be 5.5 per cent per annum.

Tenth Plan

The Tenth Five-Year Plan (2002-07) was approved by the National Development Council (NDC) in December 2002. The Plan further developed the NDC mandate objectives, of doubling the per capita income in ten years and achieving a growth rate of 8 per cent of GDP per annum. Since economic growth was not the only objective, the Plan also aimed at harnessing the benefits of growth to improve the quality of life of the people by setting of the following key targets: Reduction in the poverty ratio from 26 per cent to 21 per cent, by 2007; decadal population growth to reduce from 21.3 per cent in 1991 -2001 to 16.2 per cent in 2001-11; growth in gainful employment, at least, to keep pace with addition to the labour force; all children to be in school by 2003 and all children to complete five years of schooling by 2007; reducing gender gaps in literacy and wage rates by 50 per cent; literacy rate to increase from 65 per cent in 1999-2000, to 75 per cent in 2007; providing potable drinking water to all villages; increase in forest/tree cover from 19 per cent in 1999-2000 to 25 per cent in 2007; and cleaning of major polluted river stretches.

The Tenth Plan had a number of new features that include, among others, the following: Firstly, the Plan recognised the rapid growth in the labour force. At current rate of growth and labour intensity in production, India faces the possibility of rising unemployment, which could lead to social unrest. The Tenth Plan therefore aimed at creating 50 million job opportunities during the period, by placing special emphasis on employment intensive sectors of agriculture, irrigation, agro-forestry, small and medium enterprises, information and communication technology and other services. Secondly, the Plan addressed the issue of poverty and the unacceptably low levels of social indicators. Although these have been the objectives in earlier Plans, in the Tenth Plan there were specific monitorable targets, which needed to be attained along with the growth target.

The Incremental Capital Output Ratio (ICOR) of the economy was expected to come down to about 3.6 as against 4.5 during the Ninth Plan. This decline in ICOR was achieved mainly through better utilisation of existing capacities and suitable sectorial allocation of capital and its efficient utilisation. The growth target, therefore, required an investment

rate of 28.4 per cent of GDP. This requirement was to be met from domestic savings of 26.8 per cent of GDP and external savings of 1.6 per cent. The bulk of the additional domestic savings had to come from reduction in government dis-saving from -4.5 (2001-02) to -0.5 per cent (2006-07) of GDP. The average growth rate in the last four years of the 10th Plan (2003-04 to 2006-07) was little over 8 per cent, making the growth rate 7.7 per cent for the entire 10th Plan period. Though this was below the target of 8 per cent, it is the highest growth rate achieved in any Plan period.

Eleventh Plan

The Eleventh Five-Year Plan (2007-12) provided a comprehensive strategy for inclusive development, building on the growing strength of the economy, while also addressing weaknesses that had surfaced. It set a target for 9 per cent growth in the five-year period with acceleration during the period to reach 10 per cent by the end of the Plan.

Twelfth Plan

The Twelfth Plan fully recognises that the objective of development is broad-based improvement in the economic and social conditions of our people. However, rapid growth of GDP is an essential requirement for achieving this objective. The Approach Paper to the Twelfth Plan, had set a target of 9 per cent average growth of GDP over the Plan period (2012 to 201 7). That was before the Euro-zone crisis in that year triggered a sharp downturn in global economic prospects, and also before the extent of the slowdown in the domestic economy was known. Twelfth Plan envisaged that the current slowdown in GDP growth can be reversed through strong corrective action, including especially an expansion in investment with a corresponding increase in savings to keep inflationary pressures under control. However, while our full growth potential remains around 9 per cent, acceleration to this level can only occur in a phased manner, especially since the global economy is expected to remain weak for the first half of the Plan period.

Atal Innovation Mission

The Atal Innovation Mission (AIM) is a flagship initiative of the central government, set up by NITI Aayog to promote innovation and entrepreneurship across the length and breadth of the country. AIM is also envisaged as an umbrella innovation organisation that would play an instrumental role in alignment of innovation policies between central, state and sectoral innovation schemes, incentivising establishment of an ecosystem of innovation and entrepreneurship at various levels—higher secondary schools, science, engineering and higher academic institutions, and SME industry/corporate levels. AIM is setting up Atal Tinkering Labs (ATL) in schools across all 700+ districts across the country. These ATLs are dedicated innovation workspaces of 1,000-1,500 square feet where latest technologies like 3D printers, robotics, internet of things (IOT), miniaturised electronics 'do it yourself kits are installed using a grant of ₹ 20 lakhs from the government so that students from Grade VI to Grade XII can tinker with these technologies and learn to create innovative solutions.

At the university, NGO, SME and Corporate Industry levels, AIM is setting up world-class Atal Incubators (AlCs) that would trigger and enable successful growth of sustainable start-ups in every sector /state of the country. AIM is also providing scale-up support to existing incubators for scaling up their operations. AIM is providing a grant of up to ₹ 10 crores to successful applicants for setting up Greenfield incubators or scaling up existing ones. The idea is that every one of the 110 named smart cities and the top 5-10 educational/industrial institutions of every state should aspire to have a world-class incubator that will provide the youth/start-up communities in the universities/industries opportunity to create new start-ups.

Mentor India

The Mentor India programme launched by AIM is a path-breaking initiative to catalyse the academia-industry partnerships. Under it, more than 3,200 mentors from all over the country belonging to various industry sectors have been assigned to work with 1,800+ ATLs on a continuous basis. These mentors volunteer their time to engage with ATL students, sharing technical and professional insights. Another category of Super Mentors delivers inspiring lectures to students.

Atal Incubation Centres

Atal Incubation Centres (AlCs) and Established Incubation Centres are incubation spaces intended to provide incubation facilities to innovative startups like capital equipment and operating facilities along with sectoral experts for mentoring, business planning support, access to seed capital, industry partnerships, training and other critical components. Across the country, 19 AlCs are already operational, incubating start-ups across different fields and working on new age technology.

Atal New India Challenge

Atal New India Challenge (ANIC) is an initiative by Atal Innovation Mission aimed at supporting innovators to create products/solutions based on advanced technologies in areas of national importance and social relevance through a grant-based mechanism. AIM is working with separate ministries on this programme to identify areas of importance and attract innovations in them.

AIM has also launched another programme ARISE to promote collaborative Applied Research and Innovation between various central ministries and Micro, Small and Medium Enterprises (MSMEs). Apart from the various structured programmes, AIM from time to time keeps conducting lectures, webinars and speaker sessions for the students and start-up community.

Initiatives and Reforms

Development Monitoring and Evaluation Office

The Development Monitoring and Evaluation Office (DMEO), an attached office of NITI Aayog, is the apex monitoring and evaluation (M&E) office of the Government of India. It was established in September 2015 by merging the erstwhile Programme Evaluation Office (PEO) and the Independent Evaluation Office (IEO). DMEO's role is: (i) to monitor progress and efficacy of strategic and long term policy and programme frameworks and initiatives to help innovative improvements, including necessary mid-course corrections; and (ii) to actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery.

As a part of NITI Aayog, DMEO has advisory powers across the ministries and departments of the union government, and is one of the few institutions within the government to provide a cross- and inter-ministerial perspective. Its mandate also expands to technical advisory to states, under NITI Aayog's mandate of cooperative and competitive federalism. DMEO also has the ability to share reports reviews directly with key decision-makers in the government to initiate action. This institutional positioning also gives the organisation convening power to create a platform for M&E advancement in the country.

Agriculture Reforms

Implementation of MSP for notified crops

NITI Aayog in consultation with central ministries and states developed a mechanism for implementation of Minimum Support Price (MSP) for different agricultural crops.Three concepts were discussed: (i) Market Assurance Scheme (MAS); (ii) Price Deficiency Procurement Scheme (PDPS); and (iii) Private Procurement and Stockists Scheme (PPSS). Accordingly, Ministry of Agriculture and Farmers' Welfare launched Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA) in 2018, including three mechanisms: price support scheme or market assurance scheme, price deficiency payment scheme and pilot on private procurement stockists.

Contract Farming

The union government provided, for the first time, an opportunity to the farmers to decide the price of their produce and negotiate with buyers through Model Act on Contract Farming. The Model Act called the state/UT Agricultural Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018 was formulated in consultation with NITI Aayog and launched in 2018 for its adoption by the states/union territories. The Model Act covers the entire value and supply chain from pre-production to post-harvest marketing including services contract for the agricultural produce and livestock.

Reforms in Nutrition

POSHAN Abhiyaan

Ascheme for holistic nutrition or POSHAN Abhiyaan or National Nutrition Mission, is Government of India's flagship programme to

improve nutritional outcomes for children, pregnant women and lactating mothers. Launched in 2018, POSHAN Abhiyaan directs the attention of the country towards the problem of malnutrition and addresses it in a mission-mode. With the overarching aim to build a people's movement around malnutrition, POSHAN Abhiyaan intends to significantly reduce malnutrition in the next three years. For its implementation, the four-point strategy/pillars of the mission are: (i) inter-sectoral convergence for better service delivery; (ii) use of technology (ICT) for real-time growth monitoring and tracking of women and children; (iii) intensified health and nutrition services for the first 1,000 days; and (iv) Jan Andolan or people's movement.

POSHAN Maah

September was celebrated as Rashtriya POSHAN Maah in 2018. The activities in POSHAN Maah focused on Social Behavioural Change and Communication (SBCC). The broad themes were: antenatal care, optimal breastfeeding (early and exclusive), complementary feeding, anaemia, growth monitoring, girls' education, diet, right age of marriage, hygiene and sanitation, and eating healthy-food fortification.

Health Sector Reforms

Ayushman Bharat: Pradhan Mantri Jan Arogya Yojana

The National Health Policy 2017 envisages creation of a digital health technology ecosystem aiming at developing an integrated health information system that serves the needs of all stakeholders and improves efficiency, transparency and citizens' experience with linkage across public and private healthcare. Ayushman Bharat comprising twin missions is set to transform the nation's health system by: operationalising 1.5 lakh health and wellness centres offering preventive and primary care, on the supply side; and offering financial protection of up to ₹ 5 lakhs per year per family for the deprived 10 crores plus households towards secondary and tertiary care, on the demand side.

24 Rural Development

INDIA has been a welfare state since independence and the primary objective of all governmental endeavours has been the welfare of its people. The policies and programmes have been designed with the aim of alleviation of rural poverty which has been one of the primary objectives of planned development in India. It was realised that a sustainable strategy of poverty alleviation has to be based on increasing the productive employment opportunities in the process of growth itself. Elimination of poverty, ignorance, diseases and inequality of opportunities and providing a better and higher quality of life were the basic premise upon which all the plans and blue prints of development were built. Rural development implies both the economic betterment of people as well as greater social transformation. In order to provide the rural people with better prospects for economic development, increased participation of people in the rural development programmes, decentralisation of planning, better enforcement of land reforms and greater access to credit are envisaged. Initially, the main thrust for development was laid on agriculture, industry, communication, education, health and allied sectors but later on it was realised that accelerated development can be provided only if governmental efforts were adequately supplemented by direct and indirect involvement of people at the grassroot level.

Accordingly, in 1952, an organisation known as Community Projects Administration was set up under the Planning Commission to administer the programmes relating to community development. The Community Development Programme, inaugurated in 1952, was an important landmark in the history of rural development. This programme underwent many changes and was handled by different ministries. In October 1974, the Department of Rural Development came into existence as a part of Ministry of Food and Agriculture. In August 1979, this Department was elevated to the status of a new Ministry of Rural Reconstruction. That ministry was renamed as Ministry of Rural Development and again converted into a Department under the Ministry

of Agriculture and Rural Development. It was later rechristened as Ministry of Agriculture in September 1985. In 1991, the Department was upgraded as Ministry of Rural Development. Another Department, viz., Department of Wasteland Development was created under this ministry in 1992.

The Ministry was again renamed as the Ministry of Rural Development in 1999 with three departments, viz., Department of Rural Development, Department of Land Resources and Department of Drinking Water and Sanitation. The Department of Drinking Water and Sanitation was made a separate Ministry from July 2011. Presently, the Ministry of Rural Development consists of two departments, namely, Department of Rural Development and Department of Land Resources.

Websites: www.rural.nic.in

www.dolr.gov.in

Major Programmes for Rural Development

The major programmes being operated by the Ministry of Rural Development are: Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for providing wage employment; National Rural Livelihoods Mission (NRLM) for self-employment and skill development; Housing for All: Pradhan Mantri Awaas Yojana-Grameen (PMAY-G) for providing housing to BPL households; Pradhan Mantri Gram Sadak Yojana (PMGSY) for construction of quality roads; National Social Assistance Programme (NSAP) for social pension; Shyama Prasad Mukherjee RURBAN Mission; and Integrated Watershed Management Programme (IWMP) for improving the productivity of the land.

Rural Employment

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has come a long way since its inception and has become a lifeline to millions. The Act aims at enhancing livelihood security of households in rural areas of the country by providing not less than 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. Social inclusion, gender parity, social security and equitable growth are the founding pillars of Mahatma Gandhi NREGA.

The objectives of the scheme are: providing up to 100 days of unskilled manual work in a financial year to every household in rural areas as per demand resulting in creation of productive assets of prescribed quality and durability; enhance livelihood security of the rural poor by generating wage employment opportunities in works that develop the infrastructure base of the area concerned; strengthening and securing the livelihood resource base of the rural poor; ensure empowerment to women; and stimulate the local economy by providing a safety net to rural poor by proactively ensuring social inclusion and strengthening grass-root democratic institutions.

The government has been working towards bringing positive changes in the programme with new initiatives. Several steps have been taken to strengthen the overall implementation of MGNREGS within the overall framework of MGNREG Act, 2005. Besides ensuring a high budget allocation of meet the objectives of the Act, measures like electronic fund management system (eFMS), Aadhaar seeding, geo-tagging of assets and strengthening of Social Audit System are some steps towards bringing in more transparency and accountability in the programme implementation.

Direct Benefit Transfer

To streamline the fund flow mechanism and bring down delay in payment of wages, the Ministry of Rural Development has implemented National Electronic Fund Management System (NeFMS) across the country. This process reduces the delay in allocation of funds for payment of wages to the states and removes parking of funds at various level. Around 96 per cent of the wages are being paid electronically into the bank/post office accounts of MGNREGA workers through Electronic Fund Management System (eFMS).

Deendayal Antyodaya Yojana—National Rural Livelihoods Mission

National Rural Livelihoods Mission, renamed as Deendayal Antyodaya Yojana—National Rural Livelihoods Mission (DAY-NRLM) was launched in 2011. It seeks to reach out to 8-9 crore rural poor households and organise one woman member from each household into affinity based women SHGs and federations at village level and at higher levels. While doing so, DAY-NRLM ensures adequate coverage of vulnerable sections of the society such that 50 per cent of the

beneficiaries are members of the scheduled castes and scheduled tribes, 15 per cent from minority groups and 3 per cent from persons with disability, while keeping in view the overall target of 100 per cent coverage of the rural poor households identified through Socio Economic and Caste Census (SECC) and through participatory processes of identification of poor households and approved by Gram Sabha.

The key components of DAY-NRLM include: (i) *Promoting Institutions of Poor:* Strong quality institutions of poor such as SHGs and their federations are set up on a priority basis. In addition to generic thrift and credit based community institutions and their federations, DAY-NRLM promotes specialised institutions like livelihood collectives, producers' cooperatives/companies for livelihoods promotions. The institutions of poor empower their members and act as medium for transfer of knowledge and technology dissemination, and hubs of production, collectivisation and trade; (ii) *Training, Capacity Building and Skill Building:* Systematic and multi-pronged approach has been adopted for providing capacity building to SHGs, their federations, government functionaries, bankers, NGOs and other stakeholders. The capacity building is aimed at providing poor with the knowledge and skills to manage their institutions, link up with markets, manage their existing livelihoods and enhance their credit absorption capacity and credit worthiness. Focus is on developing and engaging community professionals and community resource persons (CRPs) in order to provide timely support and bring about reduction in poverty levels; (iii) *Community Investment Support Fund:* Community Investment Support Fund is routed to SHGs through federations (primary and secondary level) to support development of suitable livelihoods of members and to initiate collective activities, wherever feasible. A part of the CIF is provided as Vulnerability Reduction Fund (VRF) for supporting the inclusion of very poor communities and making credit accessible to them with or without interest; (iv) *National Special Fund Support for Convergence under DAY-NRLP* was provided to help states mainstream convergence as an effective method to reduce poverty and empower rural poor; (v) *Infrastructure Creation and Marketing Support:* DAY-NRLM ensures that infrastructure needs for major livelihoods activities of poor are met with. It also provides support for marketing to institutions of poor. The range of activities in marketing support include market

research, market intelligence, technology extension, developing backward and forward linkages, building livelihoods collectives and supporting their business plans; (vi) *Sensitive Support Structures:* DAY-NRLM has set up sensitive and dedicated support structures at the national, state, district and sub-district levels. These support structures are staffed with dedicated professionals; (vii) *Mahila Kisan Sashaktikaran Pariyojana (MKSP):* MKSP is a sub-component of N RLM to meet the specific needs of women farmers and achieve socio-economic and technical empowerment of the rural women farmers, predominantly small and marginal farmers; (viii) *Aajeevika Grameen Express Yojana:* The Government of India has introduced a new sub-scheme under Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) entitled "Aajeevika Grameen Express Yojana" (AGEY) from the financial year 2017-18. The main objectives of AGEY are: to provide an alternative source of livelihood to members of SHGs under DAY-NRLM by facilitating them to operate public transport services in backward rural areas, as identified by the states; to provide safe, affordable and community monitored rural transport services to connect remote villages with key services and amenities (including access to markets, education and health) for the overall economic development of the area by making use of the supports available within the framework of DAY-NRLM.

Rural Self Employment Training Institute

It has been decided to set up one Rural Self Employment Training Institute (RSETI) in each district of the country. RSETIs are bank-led initiatives with the active support of state government. The Government of India provides one time infrastructure support of ₹ 1 crore and besides reimbursing the cost of training rural poor candidates, the state government provides land free-of-cost or at nominal charges and the banks are responsible for day-to-day functioning of the RSETI. RSETIs are expected to train 750 rural poor youth each year to take up self employment in the area they reside. RSETIs also provide periodic doses of skill upgradation training for making their initiative viable and sustainable in an increasingly competitive environment. Currently 583 RSETIs are functioning in the country.

Pradhan Mantri Gram Sadak Yojana

Government of India, as the part of poverty reduction strategy, launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) 2000 as a centrally sponsored scheme to assist the states, though rural roads are in the State List under the Constitution. The primary objective of the scheme is to provide connectivity by way of an all-weather road (with necessary culverts and cross-drainage structures, which is operable throughout the year), to the eligible unconnected habitations as per core-network with a population of 500 persons (as per 2001 Census) and above in plain areas. In respect of 'special Category States' (North-East, Sikkim, Himachal Pradesh, former state of Jammu and Kashmir and Uttarakhand), the desert areas, the tribal (Schedule V) areas and 88 selected tribal and backward districts, the objective is to connect eligible unconnected habitations as per Core-Network with a population of 250 persons and above (Census 2001).

To bring execution of the programme to the desired quality standards, a three-tier quality management mechanism has been institutionalised. First-tier of this mechanism is in-house quality control at Programme Implementation Unit (PIU) level. Objective of this tier is process control through mandatory tests on material at field laboratory and workmanship. Second-tier is structured as an independent quality monitoring at state level through State Quality Monitors (SQMs) in which provision of regular inspection of works has been envisaged for ensuring better quality. Under the third-tier, independent National Quality Monitors (NQMs) are deployed by NRRDA for inspection of road works at random, not only to monitor quality but also to provide guidance by senior professionals to the field functionaries.

Rural Housing

Housing is universally recognised as a basic human need. Reducing rural housing shortage and improving the quality of housing especially for the poor is an important component of the poverty alleviation strategy of the government. The rural housing scheme Indira Awaas Yojana (IAY) implemented by Ministry of Rural Development, aimed at providing houses to families below the poverty line (BPL) in rural areas has since inception provided assistance for construction of 360 lakh houses.

In the context of government's priority for "Housing for All" by 2022, the rural housing scheme IAY has been restructured to Pradhan Mantri

Awaas Yojana— Gramin (PMAY-G), which came into effect from the financial year 2016-17. The main features of the scheme include: (a) providing assistance for construction of 1.00 crore houses in rural areas over the period of 3 years from 2016-17 to 2018-19; (b) enhancement of unit assistance from ₹ 70,000 to ₹ 1.20 lakh in plains and from ₹ 75,000 to ₹ 1.30 lakh in hilly states, difficult areas and IAP districts; (c) identification of beneficiaries based on the socio-economic and caste census (SECC 2011) data covering households that are houseless or living in houses with kutcha walls and kutcha roof with two rooms or less after excluding households falling under the automatic exclusion category; (d) setting up of national technical support agency at national level to provide technical support to the implementing agencies and to the beneficiaries in taking up construction of houses and help in achieving the target set under the project.

National Social Assistance Programme

Article 41 of the Constitution of India directs the state to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development. Directive Principles of State Policy enshrined in the Constitution of India enjoin upon the state to undertake within its means a number of welfare measures. It is in accordance with these noble principles that the Government of India introduced National Social Assistance Programme (NSAP) in 1995 as a centrally sponsored scheme under which 100 per cent central assistance is extended to the states/UTs to provide the benefits in accordance with the norms, guidelines and conditions laid down by the central government. NSAP is a social assistance programme for poor households—for the aged, widows, disabled and in the case of death of the breadwinner, thereby aiming at ensuring minimum national standards in addition to the benefits that the states are providing or might provide in further. The intention in providing hundred per cent central assistance is to ensure that social protection to the beneficiaries is available throughout the country. States are free to add on and expand their coverage.

Presently NSAP comprises the following schemes for Below Poverty Line (BPL) Households:

Indira Gandhi National Old Age Pension Scheme (IGNOAPS): Under the scheme, assistance is provided to person of 60 years and above and belonging to family living below poverty line as per the criteria prescribed by Government of India. Central assistance of ₹ 200 per month is provided to person in the age group of 60-79 years and ₹ 500 per month to persons of 80 years and above.

Indira Gandhi National Widow Pension Scheme (IGNWPS): Under the scheme central assistance of ₹ 300 per month is provided to widows in the age-group of 40-79 years and belonging to family living below poverty line as per the criteria prescribed by Government of India. After attaining the age of 80 years, the beneficiary would be shifted to IGNOAPS for getting pension of ₹ 500 per month.

Indira Gandhi National Disability Pension Scheme (IGNDPS): Under the scheme central assistance of ₹ 300 per month is provided to persons aged 18-79 years with severe or multiple disabilities and belonging to family living below poverty line as per the criteria prescribed by Government of India. After attaining the age of 80 years, the beneficiary would be shifted to IGNOAPS for getting pension of ₹ 500 per month.

National Family Benefit Scheme (NFBS): Under the scheme a BPL household is entitled to lump sum amount of money on the death of primary breadwinner aged between 18 and 59 years. The amount of assistance is ₹ 20,000.

Annapurna: Under the scheme, 10 kg of foodgrains per month are provided free of cost to those senior citizens who, though eligible under IGNOAPS, are not receiving pension under IGNOAPS.

Deen Dayal Upadhyaya Grameen Kaushalya Yojana

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is the flagship placement linked skill-training programme under the Ministry of Rural Development (MoRD). Announced in 2014, DDU-GKY is a critical component of the National Skill Development Policy, and has an ambitious agenda, to benchmark wage placement-linked skill programmes to global standards and requirements. The ultimate aim is to convert India's demographic surplus into a demographic dividend by developing rural India into a globally preferred source of skilled labour. As a result, the scheme will also benefit more than 55 million poor rural

youth who are ready-to-be skilled, by providing sustainable employment. In this way the scheme is expected to play a crucial role in generational poverty alleviation. The scheme is a pioneer in standards-led delivery of skilling, the first to notify standard operating procedures for training, and the first to introduce IT solutions for skilling, including mandatory tablets for trainees, Aadhaar-linked biometric information on attendance, and geo-tagged time-stamped record of training centres and classes. DDU-GKY has its roots in the Swarnjayanti Gram Swarozgar Yojana (SGSY). SGSY was formed by the restructuring of the Integrated Rural Development Programme (IRDP) in 1999, with a 15 per cent allocation for special projects. In 2010, SGSY was restructured as the National Rural Livelihoods Mission (NRLM), also known as Aajeevika. The Ministry revised the guidelines in 2013 as Aajeevika Skills with a view to increase the reach of the programme. On Antyodaya Diwas, September 25,2014, Aajeevika Skills was announced as DDU-GKY with a focus on providing opportunities through skilling for rural poor youth in domestic and global jobs.

Key Features

DDU-GKY follows a 3-tier implementation architecture in PPP mode, with the National Unit responsible for policy, central investments and technical support; SRLMs/State Skills Missions responsible for state investments, implementation and monitoring controls; and Project Implementing Agencies (PIAs), both public and private training partners with a legacy in skill training, responsible for mobilisation, training and placements: (i) The focus of this programmes is on the rural youth from poor families, in the age group of 15 to 35 years, belonging to: (a) MGNREGA worker household in which household members have together completed 15 days of work; (b) RSBY household; (c) Antyodaya Anna Yojana card household; (d) BPL PDS card households; (e) NRLM-SHG household; (f) Household covered under auto inclusion parameters of SECC 2011. (ii) Full social inclusion of candidates is ensured by the mandatory coverage of socially disadvantaged groups—50 per cent allocation to SC/ST groups, 15 per cent to minorities, 33 per cent for women and 3 per cent for persons with disabilities, (iii) Placement in wage employment is mandated for a minimum of 70 per cent of all successful candidates, with a minimum salary of ₹ 6,000 per month or the minimum wages, whichever is higher, (iv) The programme promotes

the economic strategies— Make In India, through proactive partnership with industry through multi-pronged engagement—champion employer policy, captive employer policy and industrial internship policy.

Saansad Adarsh Gram Yojana

Saansad Adarsh Gram Yojana (SAGY) was launched in 2014 with the aim to develop one village by each Member of Parliament as a model village by 2016 and two more by 2019. The goal of SAGY is to translate the comprehensive and organic vision of Mahatma Gandhi into reality, keeping in view the present context. SAGY lays emphasis on inspiring values of national pride, patriotism, unity, self-confidence to be as important as developing infrastructure. In other words, SAGY attempts to develop the value chain through value change. Till now, 702 Gram Panchayats have been identified by Members of Parliament under Phase-I and are taking concrete steps towards their development. This scheme is unique and transformative as it has a holistic approach towards development. It envisages integrated development of the selected village across multiple areas such as agriculture, health, education, sanitation, environment, livelihoods, etc. Far beyond mere infrastructure development, SAGY aims at instilling certain values, such as people's participation; Antyodaya; gender equality; dignity of women; social justice; spirit of community service; cleanliness; eco-friendliness; maintaining ecological balance; peace and harmony; mutual cooperation; self-reliance; local self-government; transparency and accountability in public life, etc., in the villages and their people so that they get transformed into models for others.

Key Features

The distinguishing features of SAGY are as follows: *Village Development Plan:* The Gram Panchayats adopted under SAGY prepared Village Development Plans (VDPs) containing prioritised time-bound activities to achieve holistic progress of the village, through convergence of resources. Gram Panchayats have very systematically taken development approach by involving Gram Sabha and they have prepared comprehensive VDP for their development. In order to keep track of the progress of projects listed in the VDP, a Tracking Template has been developed and the progress is monitored online; *Panchayat Darpan:* The Ministry has developed a 35-point impact monitoring tool to gauge the

impact of SAGY in the GPs. Progress is measured through outcome indicators broadly covering basic amenities, education, health, sanitation, livelihood, women empowerment, financial inclusion, food security, social security and e-governance. The impact is measured on quarterly (22 indicators), half yearly (7 indicators) and yearly basis (6 indicators).

A campaign, namely, Gram Swaraj Abhiyan was also started. This campaign, undertaken under "Sabka Sath, Sabka Gaon, Sabka Vikas", is to promote social harmony, spread awareness about pro-poor initiatives of the government, reach out to poor households to enroll them as also to obtain their feedback on various welfare programmes. During this, saturation of eligible households/persons would be made under seven flagship pro-poor programmes namely, Pradhan Mantri Ujjwala Yojana; Saubhagya; Ujala Scheme; Pradhan Mantri Jan Dhan Yojana; Pradhan Mantri Jeevan Jyoti Bima Yojana; Pradhan Mantri Suraksha Bima Yojana; and Mission Indradhanush.

Land Reforms

Watershed Management Programme

Land and water are two of the most important natural resources. Population pressures and demands on land and water and the increasing degradation of these resources are affecting the stability and resilience of our ecosystem and environment. The expansion of human settlements and infrastructure and intensification of agriculture and allied activities and their expansion into marginal areas and fragile ecosystems, emphasise the need for integrated planning and management of land and water resources.

A watershed is a topographically delineated area that is drained by a stream system. It includes physical and hydrological natural resources. Management of a watershed entails the rational utilisation of land and water resources for optimum productivity, with minimum hazards to human settlements. Watershed management is the process of guiding and organising land use and use of other natural resources in a watershed. Embedded in this approach is the recognition of the inter-relationships between land use, soil and water conservation and the linkages between uplands and downstream areas. Watershed development is a multi-disciplinary field, for sustainable natural resource management.

Watershed development activities also contribute towards mitigation and adaptation to global warming.

Watershed Development

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched in 2015-16 by amalgamating ongoing schemes of three ministries, viz., Accelerated Irrigation Benefit Programmed (AIBP) and PMKSY (WR) of the Ministry of Water Resources; River Development and Ganga Rejuvenation (MoWR RD and GR); Integrated Watershed Management Programme (IWMP) of the Ministry of Rural Development, Department of Land Resources (DoLR); and the Micro Irrigation component of On Farm Water Management (OFWM) of National Mission on Sustainable Agriculture (NMSA) of the Ministry of Agriculture and Farmers Welfare, Department of Agriculture, Cooperation and Farmers Welfare (DAC & FW). Under the erstwhile IWMP, 8,214 watershed development projects were sanctioned in 28 states (except Goa) during the period 2009-10 to 2014-15 covering an area of about 39.07 million hectares, principally for development of rainfed portions of net cultivated area and culturable wastelands. The activities undertaken interalia include ridge area treatment; drainage line treatment; soil and moisture conservation; rainwater harvesting; nursery raising; afforestation; horticulture; pasture development; livelihoods for assetless persons, etc. In 2015-16, the IWMP was amalgamated as the Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). No further watershed development projects have been sanctioned from 2015-16 onwards. At present, the principal emphasis is on qualitative and timely implementation and completion of the ongoing watershed development projects.

National Land Records Modernisation Programme

The scheme of National Land Records Modernisation Programme (NLRMP) has been renamed as Digital India Land Records Modernisation Programme (DILRMP) and is being implemented since 2008. Under it, several states/UTs have computerised the registration of records (RoRs) of land in their respective areas, stopped manual issue of RoRs and have uploaded data on their websites. Besides these, several states/UTs have done computerisation of Registration and have done integration of land records with registration. As regards the training

during this period, the NIRD and PR organised 864 training programmes with participation of 22,032 trainees, including 400 NIRD and PR networking programmes in collaboration with Institutes of Rural Development across the country.

Panchayati Raj

The mandate of the Ministry of Panchayati Raj (MoPR), which was set up in 2004, is to ensure the compliance of the provisions of Part IX of the Constitution, provisions regarding the District Planning Committees as per Article 243 ZD, and PESA. The Ministry's vision is to attain decentralised and participatory local self-government through Panchayats, or Panchayati Raj Institutions (PRIs). The Ministry's mission is empowerment, enablement and accountability of PRIs to ensure inclusive development with social justice, and efficient delivery of services. The Ministry works to fulfil its mandate in various ways. MoPR fosters knowledge creation and sharing so that the issues to be addressed are clearly articulated, meaningful strategies formulated, and there is sharing within the government as well as with non-government agencies and experts. It also provides technical assistance and facilitates cross-learning across states. In the light of recent changes in policy and to take advantage of the emerging opportunities, the Ministry has repositioned itself with basic changes in its mandate.

Website : www.panchayat.gov.in

Constitutional Mandate

Part IX of the Constitution of India provides for setting up of three tiers of Panchayats (only two tiers in case of states or union territories having population less than 2 million): (i) gram panchayats at village level; (ii) district panchayats at district level; and (iii) intermediate panchayats at sub-district level in between gram panchayats and district panchayats. It also provides for gram sabha (general assembly of registered voters who reside in the area of gram panchayat) as a forum for direct participation of villagers in local governance. The Constitution India has fixed a five-year term for these panchayats and has made provision for the reservation of seats for women and marginalised sections (scheduled castes and scheduled tribes) of Indian society. While reservation of scheduled castes (SCs) and scheduled tribes (STs) is in

proportion to their share in population, that for women is at least 33.33 per cent. However, many states have increased the reservation of seats and chairperson posts for women in panchayats to 50 percent. The Constitution of India also stipulates direct elections of all members of panchayats. For conducting these elections, all states are mandated to constitute a State Election Commission. Also it is compulsory for states to constitute a State Election Commission. Also, it is compulsory for states to constitute a State Finance Commission (SFC) every fifth year for recommending principles for division of financial resources between state and local governments (both urban and rural). SFCs are to make recommendations to the Governor regarding the distribution between the state and panchayats of the net proceeds to taxes, duties, toll and fees, etc., the determination of taxes, duties, tolls and fees which may be assigned to, or appropriated by, the panchayats, and grants-in-aid to the panchayats from the Consolidated Fund of the State, as well as measures needed to improve the financial position of panchayats.

Within this broad framework, as local government is a state subject, State legislatures have a critical role in determining various aspects of panchayati raj in their states. States play a crucial role as far as devolution of powers to panchayats is concerned. The Constitution envisaged that Panchayats will function as institutions of local government and prepare plans and implement schemes for economic development and social justice, but leaves the precise devolution of powers and authority to panchayats to the states.

Rajiv Gandhi Panchayat Sashaktikaran Abhiyan

To improve the functioning of PRI, the MoPR implemented the Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA) in the 12th Five Year Plan period, i.e., from 2012-13 upto 2015-16. The RGPSA addressed the major constraints of inadequate devolution of powers, lack of manpower, inadequate infrastructure and limited capacity in the effective functioning of panchayats by providing manpower, infrastructure, training and promotion of devolution of power to panchayats and put in place structures of accountability.

Rashtriya Gram Swaraj Abhiyan

The Rashtriya Gram Swaraj Abhiyan (RGSA) will focus on capacity building of Panchayati Raj Institutions for convergent action to deliver

basic services and achieve development goals. Under RGSA comprehensive efforts will be made to support and enhance the capacity building and training facilities for all stakeholders with particular thrust on the aspects of Gram Panchayat Development Plan compaign.

e-Panchayat

e-Panchayat was identified as one of the 27 Mission Mode Projects under the National e-Governance Plan (NeGP) formulated in 2006.

Recommendations of Fourteenth Finance Commission

Under the Fourteenth Finance Commission (FFC) award for the period 2015-2020 grants to the tune of ₹ 2,00,292.20 crore are being devolved to gram panchayats in the country constituted under Part IX of the Constitution constituting an assistance of ₹ 488 per capita per annum at an aggregate level for states to ensure stable flow of resources at regular intervals which will augment resources available with them to discharge their statutorily assigned functions. The FFC has not recommended grants to Non-Part IX areas under Schedule VI in Meghalaya, Mizoram, Tripura and Assam, the areas in the hill districts of Manipur, rural areas of Nagaland and Mizoram.

Drinking Water and Sanitation

The Department of Drinking Water Supply was created in the Ministry of Rural Development in 1999, which was subsequently renamed as the Department of Drinking Water and Sanitation in 2010. Keeping in view the significance of rural water supply and sanitation, the Government of India created and notified the Ministry of Drinking Water and Sanitation as a separate Ministry in 2011. After the notification in June 2019, the Ministry has since been renamed as Department of Drinking Water and Sanitation, Ministry of Jal Shakti. The Ministry of Jal Shakti is the nodal ministry for the overall policy, planning, funding and coordination of the flagship programmes of the Government of India, viz., the National Rural Drinking Water Programme (NRDWP) for rural drinking water supply and the Swachh Bharat Mission (Gramin) [SBM(G)] for sanitation in the country.

Website: www.jalshakti-ddws.gov.in

Swachh Bharat Mission

Swachh Bharat Mission was launched in 2014. The concept of Swachh Bharat Mission is to provide access for every person to sanitation facilities including toilets, solid and liquid waste disposal systems and village cleanliness. The programme is implemented by the Ministry of Jal Shakti. The Mission aims to increase the access to sanitation from 39 per cent in 2014 to 100 per cent by October 2019. The Action Plan calls for an Open Defecation Free (ODF) India in five years. To begin with, as part of Swachh Bharat, priority was given to build separate toilets for boys and girls in all schools of the country. This was completed within one year. To strengthen delivery mechanism in sanitation in rural areas some important measures have been taken up: (a) signing MoU with states, on water and sanitation for implementation of both water and sanitation, with interchangeability of funds between water and sanitation so that idle funds do not lie in states and targets are not starved of funds in either of the two sectors; (b) release to states with 'Just in Time' concept, to be adopted by centre to avoid extra cost of funds to Government of India; (c) enable a system of small loans through agencies like NABARD, SIDBI (or banks through priority sector lending without collateral) to those households for the construction of toilets which are eligible for incentives or need funds to construct better toilets maybe with bathing space; (d) identifying a Swachhagrahi (motivator) for each village equipping him with skills on sanitation and giving him performance linked incentives; and (e) intensive monitoring at the household level shall be taken up through the IMIS of the ministry, as already name of each household has been collected by Ministry of Jal Shakti through baseline data.

Swachh Bharat Mission (Gramin)

Intervention in the rural sanitation sector in the country was initially started in 1954 as a part of the First Five-Year Plan. The government introduced a structured scheme in the form of the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women. From 1999, a "demand driven" approach under the "Total Sanitation Campaign" (TSC) emphasising more on Information, Education and Communication (IEC), Human Resource

Development (HRD), capacity development activities to increase awareness among the rural people and generation of demand for sanitary facilities was started. The "Nirmal Bharat Abhiyan" (NBA), the successor programme of the TSC, was launched in 2012, aimed at creating Nirmal villages, provided increased incentives through convergence with MNREGS. Though these programmes had their successes, there still remained a large portion of the rural population which did not have access to toilets. To significantly upscale the programme, and bring the focus on the issue of sanitation, the Swachh Bharat Mission (Gramin) was launched in 2014. The focus of the new strategy is to move towards a Swachh Bharat by providing flexibility to state governments (sanitation being a state subject), to decide on their implementation policy and mechanisms, taking into account state-specific requirements.

The main objectives of the SBM(G) are : (a) to bring about an improvement in the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation; (b) accelerate sanitation coverage in rural areas to achieve the vision of Swachh Bharat by October 2, 2019; and (c) encourage cost-effective and appropriate technologies for ecologically safe and sustainable sanitation.

The Ministry is reforming the sanitation sector by shifting metric from building toilets to Open Defecation Free villages. Behaviour change is the primary focus and fundamental tool for achievement of ODF outcomes. The Ministry is doing it by its focused Information, Education and Communication (IEC) programme. It promotes gender sensitive information, behaviour change guidelines and various mass education activities. The Ministry issued gender guidelines in 2017 and menstrual management guidelines in 2015.

Swachhata Pakhwada

Swachhata Pakhwada was started in April 2016 with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging GoI ministries and departments in their jurisdiction. An annual calendar is pre-circulated among the ministries to help them plan for the Pakhwada activities.

Namami Gange

Namami Gange Programme is an initiative of Ministry of Jal Shakti, aimed at making villages on the bank of river Ganga ODF and interventions dealing with solid and liquid waste management. All 4,470 villages located across 52 districts of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal have since been made ODF with active help of state governments. Now the Ministry has taken up 24 villages on the bank of river Ganga to transform them as Ganga Grams in coordination with National Mission for clean Ganga (NMCG).

Ganga Gram is another inter-ministry project between SBM and the Namami Gange Programme. Ministry of Jal Shakti, which is responsible for sanitation in villages on the banks of river Ganga, is also coordinating the Ganga Gram Project. The Project is focused on better cleanliness and infrastructure facilities, through convergence with other departments. Ganga Gram Project was unveiled in 201 7 at a grand *sammelan* of sarpanches where all 4,475 Ganga Grams were declared Open Defecation Free (ODF). Later, state governments identified 24 Ganga villages to be taken up as pilot project to transform them into Ganga Grams which encompasses Open Defecation Free (ODF); renovation of ponds and water sources; promotion of sprinkler irrigation; promotion of tourism; modern crematorium infrastructure; convergence of central and state schemes; proper disposal of waste water; proper disposal of solid waste; water conservation projects; organic farming; horticulture; medicinal plants; and awareness drives that were also taken up amongst villagers on the degenerating effect of open defecation and improper waste disposal, not only for the river but also for the village.

Gram Panchayats have been empowered to play an active role in ownership and maintenance of Ganga Gram activities. People's involvement is a major plank of Ganga Gram Project. Further, in order to strengthen the Ganga Gram initiative and to give a focused reinforcement in making Ganga Swachhta Sammelan a Jan Andolan, Ministry of Jal Shakti organised Ganga Chaupal in 2018 and in continuation to this, Ganga Gram Swachhta Sammelans were organised.

Swachhta Action Plan

Swachhta Action Plan (SAP), a first of its kind inter-ministerial programme for Swachhta, is a concrete realisation of the vision that swachhta is everyone's business. All Union ministries/departments have

started to work for its realisation in a significant manner with appropriate budget provisions.

Swachh Iconic Places

The Ministry has taken up a multi-stakeholder initiative focusing on cleaning up 100 places across the country that are "iconic" due to their heritage, religious and/or cultural significance. The goal of the initiative is to improve the cleanliness conditions at these places to a distinctly higher level. This initiative is in partnership with ministries of Urban Development, Tourism and Culture with Ministry of Jal Shakti being the nodal ministry. So far, in first two phases, 20 iconic places has been taken up. All these 20 iconic sites have designated PSUs for financial and technical support.

National Rural Drinking Water Programme

The National Rural Drinking Water Programme (NRDWP) is a centrally sponsored scheme aimed at providing adequate and safe drinking water to the rural population of the country. The NRDWP is a component of Bharat Nirman which focuses on the creation of the infrastructure. This has resulted in the provision of significant additional resources to the sector and for creating an environment for the development of infrastructure and capacities for the successful operation of drinking water supply schemes in rural areas. Rural drinking water supply is a state subject and is also included in the Eleventh Schedule of the Constitution amongst the subjects that may be entrusted to panchayats by the states. Thus, the participation of the Panchayati Raj Institutions in the rural drinking water supply sector is an important area of focus.

Government of India's major intervention in water sector started in 1972-73 through the Accelerated Rural Water Supply Programme (ARWSP) for assisting states/UTs to accelerate the coverage of drinking water supply in 'problem vi Mages'. A Technology Mission with stress on water quality, appropriate technology intervention, human resource development support and other related activities was introduced in 1986, which was subsequently renamed as the Rajiv Gandhi National Drinking Water Mission (RGNDWM) in 1991. In 1999-2000, Sector Reform Projects were started to involve the community in planning, implementation and management of drinking water schemes which was

in 2002 scaled up as the Swajaldhara programme. The programme was revised in 2009 and named as National Rural Drinking Water Programme (NRDWP).

25 Scientific and Technological Developments

THE Department of Science and Technology (DST) functions as the nodal agency to connect science and technology sector to government verticals. DST provides the largest extramural research and development support in the country to strengthen national S&T capacity and capability through a competitive mode to scientists cutting across institutions and disciplines. This strategically important function mutually reinforces outcomes of our country's educational, scientific and industrial R&D initiatives and helps transform the S&T landscape of the country.

Department of Science and Technology

Department of Science and Technology, in its endeavour to strengthen national science and technology capacity and capability, kept its pace to implement several planned initiatives to enable Indian S&T community to increase scientific and technological outputs. Some of the important domains in which the Department devotes its attention are: strengthening the pool of scientists and technologists for carrying out globally competitive R&D in cutting edge areas of science; nurturing R&D institutions and building infrastructural facilities for enhancing global ranking of India in scientific research; support for the establishment of multi-stakeholder mechanisms for partnerships for promoting science; deploying technology through national missions; developing capacity of institutions and industry for technology commercialisation for solving national challenges; providing S&T inputs to society for its socio-economic benefits; and policy formulation for this sector.

Website: www.dst.gov.in

Science, Technology and Innovation Policy

The Science, Technology and Innovation (STI) Policy unveiled in 2013 includes a thrust for innovations in science and technology sector. STI policy reveals an aspiration to gain global competitiveness and link science sector to the developmental agenda of the country. Science, research and innovation system for high technology led path for India (SRISHTI) is the main policy goal. Integration of science, research and innovation systems and emergence of India as one of the top five of six knowledge powers in science are expressed aspirations of the STI policy. To translate this vision into action, the Department has already established a dedicated Policy Research Cell. Five policy research centres in academic institutions have been established to develop and design new programmes and action plans for implementation in science, technology and innovation sector in the country.

CAWACH for Covid-19

The financial year 2019-20 at its closure saw severe disruption due to SARS-COV-2 related pandemic. Visualising the gravity of the situation and the necessity for an early outcome to combat the pandemic, DST launched a funding initiative-Centre for Augmenting WAR with Covid-19 Health Crisis (CAWACH) in March 2020. The aim was to nationally scout and support the innovations and start-ups in the areas of diagnostics and drugs, disinfectants and sanitizers, ventilators and medical equipment, PPEs and informatics to address Covid-19 challenges by scaling up efforts at the national level.

Science and Engineering Research

The research and development in frontier areas of science and engineering has received an overwhelming support with the establishment of the Science and Engineering Research Board (SERB). The multifaceted programmes of the Board have ensured its reach among various S&T stakeholders. Several new initiatives have been launched by the Board recently to reverse the brain drain at different stages of scientific careers such as Early Career Research Awards (ECRA) for young faculty for setting up laboratory facilities for quick launching of research by new faculty, around 300 candidates will be supported annually under ECRA.

Teachers' Associates for Research Excellence (TARE) Mobility Scheme: The

Scheme launched in 2016-17 aims to facilitate mobility of faculty members working in a regular capacity in state universities/colleges/academic institutions such as NTs, MSc, IISERs, national labs, etc., located nearer to the institution where the faculty member is working. This would bring in our research stream the latent or dormant scientific manpower with modest investment and improve the potential for research and teaching in such institutions. Provision of fellowship amount of ₹ 5,000 per month, contingency grant of ₹ 5 lakh per annum and overhead for a period of 3 years has been made.

Interdisciplinary Cyber Physical Systems

Cyber-Physical Systems (CPS) combine digital/cyber elements with physical objects (machines, autonomous vehicles) and data with capabilities of communication, data collection and processing, computing, decision making and action. It allows organisations to take timely and optimal interventions/ actions. CPS is an integrated system involving sensors, communication, actuators, control, interconnected computing networks and data analytics. Government approved it in 2018 for a period of five years to be implemented by DST. Its main objectives include: technology development, translational research and commercialisation in CPS and associated technologies; produce next generation skilled manpower; accelerate entrepreneurship and start-up ecosystem development in CPS; and give impetus to advanced research in CPS, technology development and higher education in science, technology and engineering disciplines, etc.

Opportunities for Women Scientists

Department of Science and Technology launched several initiatives for women in science under its flagship scheme namely KIRAN (Knowledge Involvement in Research Advancement through Nurturing). Through this unique initiative, DST provides opportunity to women scientists who had break in their career, primarily due to family reasons, to pursue research in physical and mathematical sciences, chemical sciences, life sciences, earth and atmospheric sciences and engineering technology.

Attracting Young Talent

The department is implementing Million Minds Augmenting National Aspiration and Knowledge (MANAK) scheme under its flagship programme Innovation in Science Pursuit for Inspired Research (INSPIRE). The INSPIRE awards MANAK scheme is a unique initiative to attract talented school students at an early age to study science and pursue research career apart from fostering a culture of innovation among them. The scheme caters to school children in the agegroup of 10-15 years and studying in Classes 6-10. INSPIRE award MANAK scheme targets ten lakh ideas from more than five lakh middle and high schools across the country every year. Out of these, one lakh ideas are eligible for INSPIRE award of ₹ 10,000 each. These selected students then participate in district, state and national level exhibitions and competitions. The participants of national level exhibition are provided mentorship at premier educational and technical institutions of the country. Top sixty projects are rewarded as national winners. National Innovation Foundation, an autonomous institution of DST is the resource partner under this scheme.

Water Technology Initiative

Water Technology Initiative (WTI), initiated in 2007, aims to promote R&D activities aimed at providing safe drinking water at affordable cost and in adequate quantity using appropriate science and technology interventions evolved through indigenous efforts. Since quality is the main consideration of safe drinking water, processes which imply nano-material and filtration technologies have been focused. The initiative also includes the pilot testing of credible number of products and referencing of selected technologies to the social context of the application region. Technology Mission on Winning, Augmentation and Renovation (WAR) for Water was launched in 2009 to undertake research-led solutions, through a coordinated approach, to come out with technological options for various water challenges in different parts of the country. The Department has developed necessary knowledge network for evolving customised technological solutions for water challenges suited to specific social context. Recognising the immense value of the expertise developed, continued need for scientific and technological inputs and insight gained during the course of implementation of R&D activities for

addressing water challenges during the course of implementation of Technology Mission: Winning, Augmentation and Renovation of Water, the department proposes to continue the initiative with national and global R&D institutions, state governments, central ministries and other stakeholders. The activities of WAR for Water are now integrated with Water Technology Initiative. The implementation approach is a mix of the Mission implemented by DST and initiative mounted by DST.

This proactive India centric 'solution science' endeavour aims to strengthen the R&D capacity and capability to develop the technological solutions for existing and emerging water challenges facing the country. Its aims and objectives include: to promote national and collaborative developmental research to address prevalent and emerging water challenges; to evolve methodology for development of customised solutions suited to social context; and to conduct techno-economic-social analysis of technologies and their suitability in specific context, etc.

Nano Science and Technology

National Mission of Nano Science and Technology - an umbrella programme - was launched in 2007 to promote R&D in this emerging area of research in a comprehensive fashion. The main objectives of this mission are : basic research promotion, research infrastructure development, nano application and technology development, human resource development, international collaboration and orchestrating national dialogues.

Climate Change

National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Mission for Strategic Knowledge on Climate Change (NMSKCC) launched under National Action Plan for Climate Change (NAPCC) are under implementation by the Department. As part of deliverables of these national missions, six major research programmes have been initiated. Himalayas Climate Change Portal (http://knowledgeportal-nmshe.in) was launched to make the knowledge on Himalayas readily available for the end users and community.

Clean Energy Research Initiative

The initiative supports fresh ideas/concepts, including feasibility assessment of various emerging and disruptive technologies, for their potential conversion into useful technology/product. This is intended to be achieved through promoting oriented basic, applied and pre-competitive translational research for progressively achieving enhanced Technology Readiness Levels (TRLs). This initiative of the department directly caters to furthering the Sustainable Development Goal #7 (SDG 7), which aims to ensure access to affordable, reliable, sustainable and modern energy for all.

National Initiative for Developing and Harnessing Innovations (NIDHI)

It has evolved as an umbrella scheme for a seamless innovation ecosystem booster. Major links of the innovation to market value chain would be supported and strengthened at various nodes (each node signifying a cluster of 3 neighbouring districts) across the country to attain the mission of nation building through innovation, entrepreneurship and incubation. The specific components of NIDHI are: grand challenge and competitions for scouting innovations; promotion and acceleration of young and aspiring innovators and start-ups (PRAYAS) - support from idea to prototype; entrepreneur in residence (EIR) - support system to reduce risk; start-up-NIDHI through innovation and entrepreneurship development centres (lEDCs) in academic institutions for encouraging students to promote start-ups; start-up centre in collaboration with MoE - inculcating a spirit of entrepreneurship in national institutions of higher learning; technology business incubator (TBI) - converting innovations to start-ups; accelerator - fast-tracking a start-up through focused intervention; seed support system (SSS) - providing early stage investment; and centres of excellence (COE) - a world class facility to help start-ups go global and/or scale up.

Autonomous Bodies

The DST nurtures 25 autonomous bodies. These include 16 research institutions, four specialised knowledge institutions and S&T service organisations and five professional bodies. The 16 research institutions in the DST family form a very special group from several points of view. Some of these are among the oldest research institutions in the country, some were started by eminent scientists and individuals like Mahendra

Lal Sircar, CV Raman, JC Bose, Birbal Sahni and DN Wadia, some are repositories of very old and valuable scientific data, some more decit astronomy, astrophysics, geomagnetism, advanced materials and nano science and technology, to name a few.

Research for Covid-19

To ramp up the Covid-19 testing capacity in the country, DST has engaged five of its laboratories for Covid-19 testing related activities as per the ICMR guidelines in collaboration with the Department of Health Research. A unique type of face mask, named as Tribo-E mask, was designed and developed. This mask has a design (patent pending) that helps to create enough space in front of the mouth while speaking. This snug fit mask, unlike other commercially available masks, actually prevents speech distortion or fogging on eye glasses due to leakage of exhaled breath. Another important advantage is its high breathability allowing one to wear without any discomfort. Further, the fabric layers are chosen in a particular way, to generate triboelectricity that helps increase the filtration efficiency without comprising the breathability (pressure drop).

Translational Research Programme

Translational Research Programme was launched along with five technical research centres with a mission to provide techno-legal-commercial and financial support to scientists, entrepreneurs, and business fraternity. This was mainly to achieve translation of research into products and processes for greater economic and societal benefits in DST institutions.

Survey of India

Survey of India (SOI), the national survey and mapping organisation under the Ministry of Science and Technology, was set up in 1767. In its assigned role as the National Principal Mapping Agency, Survey of India, bears a special responsibility to ensure that the country's domain is explored and mapped suitably to provide base maps for expeditious and integrated development and ensure that all resources contribute their full measure to the progress, prosperity and security of the country. The primary responsibility of SOI is to maintain topographical map coverage on 1:250K, 1:50K and 1:25K scales. The topographical map coverage on

1:250K and 1:50K scales, covering the entire country has been completed and the map sheets are being updated at regular intervals to depict latest spatial information. Surveys on 1:25K scale were taken up as national requirement keeping in view the priorities indicated by the central/ state governments and other user agencies. It has also been called upon extensively to deploy its expertise in the field of geodetic and geophysical surveys, study of seismicity and seismotectonics, glaciology, participation in Indian Scientific Expedition to Antarctica and projects related to digital cartography and digital photogrammetry, etc., to provide basic data to keep pace with Science and Technology Department.

SOI has undertaken creation of digital cartographic database of topographical maps on various scales. The digital data is being used by various agencies for planning and GIS applications. It also undertakes large scale surveys for various developmental projects including hydro-electric, irrigation, command area, canal area, cantt. area schemes, etc. The Department is responsible to fix the external boundary of India, their depiction on maps published in the country and also advise on the demarcation of inter-state boundaries. The Survey of India also provides support to other countries e.g., Nigeria, Afghanistan, Kenya, Iraq, Nepal, Sri Lanka, Zimbabwe, Indonesia, Bhutan, Mauritius, etc., in the field of mapping, survey education, transfer of technology, and various other surveying technologies under bilateral arrangements. Under UN mandate, Survey of India also provides support to countries in the Asia-Pacific region for capacity building in spatial data infrastructures.

Survey Training Institute, Hyderabad established under UNDP assistance is a premier institution for training in various disciplines of surveying and mapping to the trainees sponsored by the Department, other state/central government organisations and neighbouring countries.

Keeping in view a new National Map Policy announced in May 2005, Open Series Maps based on UTM projection and WGS-84 datum, which is compatible with the coordinate system of GPS, used in all activities of surveying and mapping, are being published for user community. Defence Series Maps based on Lambert Conformal Conic Projection and WGS-84 datum are being published for defence forces which are declared as classified. SOI is in the forefront of providing tidal information for the Indian Ocean by observing sea level data at various ports of India and

other countries. These are crucial for scientific study in fields including climatology modelling, analysis of sea level changes, predicting Tsunami, etc. Besides, this is also important input for sea navigation.

Geo-spatial data are being generated at various levels and by various agencies. These are being utilised for various application which need the integration of data from various sources. To enable this data integration, SOI has taken in its hand a herculean task of redefining the vertical datum of geoids by establishing a network of well spread standard ground control points throughout the country. This will enable the state cadastral department besides other agencies and industries engaged in acquiring geo-spatial information to carry out their job in a national reference system.

While Survey of India meets the national needs in cartography, some specialised thematic maps required to meet the needs of the specific users are taken care of by the National Atlas and Thematic Mapping Organisation (NATMO) operating under the Department. It also concentrates in a number of areas to integrate resource maps with other relevant socio-economic data and represent them in spatial forms, useful for developmental planning. NATMO is trying to develop the technology of reverse printing for maps on experimental basis. It is also trying to introduce the technique of using metallic colours in map printing.

Website: www.surveyofindia.gov.in

Council of Scientific and Industrial Research

The Council of Scientific and Industrial Research (CSIR) constituted in 1942 is an autonomous body, which is known for its cutting edge R&D knowledge base in diverse S&T areas. Having pan-India presence, CSIR has a dynamic network of 38 national laboratories, 39 outreach centres, 3 innovation complexes and 5 units. Its R&D expertise and experience is embodied in about 4,000 active scientists supported by about 7,000 scientific and technical personnel. It covers a wide spectrum of science and technology—from radio and space physics, oceanography, earth sciences, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology. It provides significant technological intervention in many areas with regard to societal efforts

which include environment, health, drinking water, food, housing, energy, leather, farm and non-farm sectors. CSIR is the nation's custodian for measurement standards of mass, distance, time, temperature, current, etc. It has created and is the custodian of Traditional Knowledge Digital Library (TKDL) which is a powerful weapon against unethical commercial exploitation of Indian traditional knowledge. It maintains Microbial Type Culture Collection (MTCC) and Gene Bank. Pioneer of India's intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains.

Website: www.csir.res.in

Atomic Energy

The Department of Atomic Energy (DAE), established in 1954, is engaged in the development of nuclear power technology, applications of radiation technologies in the fields of agriculture, medicine, industry, and basic research. Some of these are: (i) increasing the share of nuclear power through deployment of indigenous and other proven technologies and also developing fast breeder reactors and thorium reactors with associated fuel cycle facilities; (ii) building and operation of research reactors for production of radioisotopes and carrying out radiation technology applications in the field of medicine, agriculture and industry; (iii) developing advanced technologies such as accelerators, lasers and encourage transfer of technology to industry; (iv) support to basic research in nuclear energy and related frontier areas of science, interaction with universities and academic institutions, support to R&D projects having a bearing on DAE's programmes and international cooperation in related areas of research; and (v) contribution to national security. An integrated group of organisations, the department comprises five research centres, three industrial organisations, five public sector undertakings and three service organisations. It has two boards for promoting and funding extramural research in nuclear and allied fields, and mathematics. It also supports seven institutes of international repute, engaged in research in basic sciences, astronomy, astrophysics, cancer research, education, etc., and a society that provides educational facilities to the children of DAE employees.

DAE has wide ranging capabilities in uranium mining and mineral procesing, and is self-suficient in the production of heavy water, zirconium alloy components and other materials and supplies, for pressurised heavy water reactor. The Nuclear Fuel Complex at Hyderabad manufactures fuel assemblies for pressurised heavy water reactors, boiling water reactors and fast breeder reactor.

Website: www.dae.gov.in

Nuclear Power Programme

To utilise uranium and large thorium reserves in the country for electricity generation, India has been pursuing a three-stage nuclear power programme (NPP). For the first stage of nuclear power programme the Nuclear Power Corporation of India Limited (NPCIL), a Public Sector Enterprise under DAE, is responsible for siting, design, construction, commissioning and operation of nuclear power reactors. At present, 22 nuclear power reactors with an installed capacity of 6,780 MW are running.

The Heavy Water Board (HWB) has contributed successfully to the first stage of Nuclear Power Programme by producing heavy water for all pressurised heavy water reactors (PHWRs) in a cost-effective manner enabling the Department to provide nuclear power at an affordable cost. Presently, the Board is not only self-sufficient in meeting the domestic demand of heavy water, but is also geared up to supply heavy water for the future PHWRs and Advanced Heavy Water Reactors (AHWRs) as per the envisioned nuclear power programme of DAE. Over a period of time, HWB has emerged as the largest global producer and a trusted supplier of this strategic material.

HWB has made major progress on its extended mandate in the field of development, demonstration and deployment of technologies for in-core and out of core material inputs for Indian Nuclear Power Programme, required at the front-end as well as back-end of nuclear fuel cycle mainly centering around three broad areas such as solvents for front and back-end hydrometallurgical operations of nuclear fuel cycle; demonstrating solvent extraction technology for extraction of various rare materials and producing stable isotopes.

Solvent Technology

In the area of solvents, both the industrial facilities at HWP, Baroda and Talcher for production of TBP (Tributyl Phosphate) and D2EHPA have performed very well enabling HWB to meet the entire requirement of NFC, NRB and all other units of DAE.

Boron Enrichment

In consonance with the material input required for second stage of NPP based on Fast Breeder Reactors (FBRs), HWB, with its decades of experience of handling isotope separation process, took up development, demonstration and deployment of indigenous technologies for production of enriched boron. HWB has now acquired comprehensive capability in this area achieving enrichment levels beyond 95 per cent in multiple chemical forms.

Sodium

Sodium is another important input for FBRs, used as coolant in the reactor. Networking with the Indian R&D organisations, HWB has developed indigenous and safer closed electrolytic cell technology for production of nuclear grade sodium. Successively larger size cells are tested with the ultimate intent of an industrial scale set-up.

Mineral Exploration and Mining

Atomic Minerals Directorate for Exploration and Research (AMD) continued the accelerated pace of exploration activities by integrated, multi-disciplinary methodology and judicious utilisation of manpower with a focused approach on augmentation of uranium, thorium and rare metals. This resulted in the augmentation of additional uranium oxide (U_3 O_8) reserve of over 15,775 tonnes in Andhra Pradesh, Meghalaya, Rajasthan and Jharkhand.

R&D Support to Power Sector

The research and development support to the Nuclear Power Programme is provided by the research centers of DAE. Numerical models were developed and validated for deflagration, flame acceleration and detonation using experimental data to understand different physical and chemical processes during hydrogen combustion. Fitness-for-Service and assessment of remaining life of hemispherical bottom head of second stage hot tower of HWP, Kota, was carried out by finite element analyses and limit load calculations.

Health Safety and Environment

Review of safety of operating stations was carried out on a regular basis. It continued to maintain low radiation exposure in the public domain due to operation of nuclear power stations. At all operating stations of NPCIL certified Environmental Management System (EMS) as per SO-14001: 2004 and Occupational Health and Safety Management System (OHSMS) as per IS-18001: 2007 are maintained and regular audits (internal, external and management) were carried out for continual improvement.

An online thoron monitoring network was installed and made operational at Power Reactor Thoria Reprocessing Facility (PRTRF) at Trombay to monitor the thoron gas concentration at various locations in the facility. Internal exposure assessment of occupational workers from various facilities of Bhaba Atomic Research Centre (BARC) at Mumbai and Tarapur was carried out by whole body/ lung counting and bioassay (urine/fecal) sample analysis. All the plants of Heavy Water Board are certified for ISO Quality Management System, Environmental Management System and OSHA System. The overall safety standards of heavy water plants were far better than similar chemical industries in the country.

Fast Breeder Reactors

For the second stage of the Nuclear Power Generation Programme, the Indira Gandhi Centre for Atomic Research (IGCAR) is pursuing development of sodium cooled fast breeder reactors and associated fuel cycle technologies. Breeder reactors produce more fuel than they consume. The fast reactor programme of IGCAR is supported by its research and development endeavour in a range of disciplines such as reactor engineering, metallurgy, materials science, instrumentation, safety, etc. The Fast Breeder Test Reactor (FBTR), operating at Kalpakkam for over 25 years, also caters to technology development related to fast reactors.

Thorium Based Reactors

Nuclear power employing closed fuel cycle is the only sustainable option for meeting a major part of the world energy demand. World resources of thorium are larger than those of uranium. Thorium therefore is widely viewed as the ‘fuel of the future’. The Indian Nuclear Power

Programme Stage-3 aims at using thorium as fuel for power generation on a commercial scale. In the thorium fuel cycle, thorium 232 is transmuted into the fissile isotope uranium 233 which is a nuclear fuel.

Kalpakkam Mini (Kamini) Reactor

Kamini reactor was operated successfully for neutron radiography of various pyro devices for Department of Space. High temperature fission chambers required for neutron flux measurement of Prototype Fast Breeder Reactor (PFBR) were successfully tested.

Advanced Technologies

The research centres of DAE are engaged in developing advanced technologies such as accelerators, lasers, advanced materials, robotics, supercomputers, instrumentation and others. BARC, RRCAT, VECC and BRIT are also engaged in the development of radiation technologies and their applications for better crop varieties; techniques for crops protection; radiation-based post-harvest technologies; techniques for radio-diagnosis and radiotherapy of diseases particularly cancer; technologies for safe drinking water; better environment; and industrial growth.

Electronics & Instrumentation

The Electronics Corporation of India Limited (ECIL) continued to remain engaged in the design; development; manufacture; supply; installation and commissioning of electronic equipment for the atomic energy; defence; aerospace; security; information technology; and e-governance sectors.

Robotics

A robot-based frameless stereotactic system is developed at BARC for performing neurosurgery which has accuracy and patient comfort level comparable to frame-based system. It automates the frameless stereotaxy using a high-precision robot (Parallel Mechanism based Robot).

Cryogenics

A cryogenic system consisting of cryogen distribution lines for liquid helium and liquid nitrogen, sub-atmospheric vacuum jacketed lines for helium, warm helium lines between the helium buffer tanks and compressors, and a 500 watt helium liquefier is being set-up for the superconducting electron and heavy-ion linacs at VECC.

Radioisotopes & Radiation Technology

DAE has been playing a significant role in the development and applications of various radioisotopes in healthcare, industry, agriculture and research. India is one of the leading countries in the isotope technology today as a result of the consistent efforts of DAE.

Radioisotopes are produced in the Dhruva Research Reactor at Trombay, accelerator at Kolkata and the various nuclear power plants of NPCIL. A wide variety of radioisotopes for medical, industrial and research applications were produced and supplied by BARC. The Board of Radiation and Isotope Technology (BRIT) produced and supplied a wide range of radioisotope products, and radiation technology equipment for medical and industrial uses.

Homi Bhabha National Institute

The Homi Bhabha National Institute (HBNI) was accredited as a deemed university by Ministry of Education. HBNI continued its academic programmes by offering various courses with its eight boards of studies, namely, as chemical sciences, engineering sciences, health sciences, life sciences, mathematical sciences, physical sciences, strategic studies and undergraduate studies.

Training

Selection of trainees under Orientation Course for Engineering Graduates & Science Post-Graduates (OCES) and DAE Graduate Fellowship Schemes (DGFS) at BARC were pursued with high standards. At IGCAR the training programmes for Trainee Scientific Officers (TSOs) and doctoral programmes in the frontier areas of engineering and basic sciences for the inducted research scholars continued.

Indian Space Programme

Space activities in the country were initiated with the setting up of Indian National Committee for Space Research (INCOSPAR) in 1962. In the same year, work on Thumba Equatorial Rocket Launching Station (TERLS) near Thiruvananthapuram was also started. Indian Space Research Organisation (ISRO) was established in August 1969. The Government of India constituted the space commission and established the Department of Space (DOS) in 1972 and brought ISRO under DOS in

1972. Space Commission formulates the policies and oversees the implementation of the Indian space programme to promote the development and application of space science and technology for the socio-economic benefit of the country. DOS implements these programmes through, mainly, Indian Space Research Organisation (ISRO), Physical Research Laboratory (PRL), National Atmospheric Research Laboratory (NARL), North Eastern-Space Applications Centre (NE-SAC) and Semi-Conductor Laboratory (SCL). Antrix Corporation, established in 1992 as a government owned company, markets the space products and services.

Chandrayaan-2 Mission

India's Geosynchronous Satellite Launch Vehicle, GSLV Mklll-M 1, successfully launched Chandrayaan-2 spacecraft into its planned orbit with a perigee (nearest point to earth) and an apogee (farthest point to earth) of 45,475 km. The launch took place from the second launch pad at Satish Dhawan Space Centre SHAR Sriharikota. This mission was a highly complex mission, which represented a significant technological leap compared to the previous missions of ISRO. It comprised an orbiter, lander and rover to explore the unexplored South Pole of the moon. The mission was designed to expand the lunar scientific knowledge through detailed study of topography, seismography, mineral identification and distribution, surface chemical composition, thermo-physical characteristics of top soil and composition of the tenuous lunar atmosphere, leading to a new understanding of the origin and evolution of the moon.

Other Activities

Six launch vehicle missions were successfully accomplished. The successful launch of GSLV-MkIII D2, the second developmental flight of India's most powerful launch vehicle was the highlight of 2018. Successful launch of GSLV-F11 and four PSLV launches from Satish Dhawan Space Centre were also accomplished. ISRO could place five Indian satellites into the orbits. These included one earth observation satellite, three communication satellites and one navigation satellite. Pad Abort Test, which was conducted in July 2018, was one the major milestones in proving critical technologies for Gaganyaan.

Website: www.isro.org

Space Applications

One of the unique characteristics of Indian space programme has been the application-oriented efforts and the benefits that have accrued to the country through these programmes. The social services from INSAT/GSAT systems in various areas of communication in addition to tele-education and telemedicine have continued. Remote Sensing applications projects at national, state and local levels made significant progress through a well-established multi-pronged implementation architecture of National Natural Resources Management System (NNRMS) in the country. During the year, Indian Remote Sensing Satellite constellation helped in providing vital inputs in agricultural crops inventory, agricultural drought assessment, forest fire monitoring, effective use of ground-water prospects maps, and varieties of governance applications.

The Disaster Management Support (DMS) Programme of ISRO is continuing to provide space based inputs for the effective management of disasters in the country. The Decision Support Centre (DMSDSC), established at National Remote Sensing Centre (NRSC), is engaged in monitoring of natural disasters such as floods, cyclones, landslides, forest fires, etc. During the fire season (February to June), daily near real time fire alerts were provided using satellite data. These inputs were provided in less than 30 minutes from the completion of satellite overpass. The activity was carried out in collaboration with the Forest Survey of India (FSI), covering the entire nation.

National Database for Emergency Management (NDEM) continued to provide disaster related inputs for states/UTs with multi-scale geo-spatial database. In addition to these daily data, alerts/warnings from forecasting agencies were also provided as part of NDEM dashboad. IRSO is a signatory of the International Charter for ’space and Major Disasters’, which aims at providing a unified system of space data acquisition and delivery to users affected by disasters. For this, ISRO supports the charter and Sentinel Asia by planning satellite data acquisition from various Indian Remote Sensing Satellites and is providing the same within a stipulated time period.

Space Science and Planetary Research

Mars Orbiter Mission (MOM), which is India's first inter-planetary spacecraft mission, continues to provide vital information on regular basis about Mars. The health parameters of spacecraft are normal. Scientific analysis of the data being received from the spacecraft is being done on various aspects of the planet. During the year, an orbit maneuver was also successfully performed on the spacecraft, which removed the danger of long period eclipse till 2021.

AstroSat, India's first multi-wavelength observatory, is now being operated as an 'Observatory', in which observational time is allocated based on the proposals received from interested researchers and scientists in the country, through IRSO's Announcement of Opportunity (AO).

Capacity Building

The achievements of Indian space programme have been primarily due to the well-established mechanisms of taking up a task and achieving the same with commitment and dedication with professionalism. Recognising the importance of nurturing such unique talents and motivating principles, the Department has always emphasised on the capacity building related aspects. Capacity building encompasses multiple areas of development to ensure that the department achieves its goals, as envisioned. Following are some of the key areas of capacity builiding.

International Cooperation

International cooperation is an integral part of Indian space activities and ISRO continues to lay importance on bilateral and multilateral relations with space agencies and space related bodies with the aim of taking up new scientific and technological challenges; defining international frameworks for exploitation and utilisation of outer space for peaceful purposes, refining space policies and building and strengthening existing ties between the countries. ISRO signed cooperative agreements with the French, UAE, Japanese, US, Vietnamese, Afghanistan and Russian agencies as well the US Geological Survey.

Space Commerce

Antrix Corporation Limited, the commercial arm of the Department of Space, is marketing the Indian space products and services in the global

market. Antrix offers a wide range of services from the space-based systems through specific commercial contracts with other agencies, including foreign customers. Antrix is recognised as one of the prominent service provider in providing support are well established with prominent international customers using our network of ground stations for meeting various mission requirements.

Government created the New Space India Limited (NSIL) as a Central Public Sector Enterprise under the administrative control of Department of Space in 2019. It was created with the vision to provide the products and services emanating from the Indian Space Programme to the Indian and global customers and spur the growth of the Indian Industry to undertake technological challenges in space related activities. The mandate of NSIL includes: building and in-orbit delivery of different types and class of satellites; owning and operating satellites for providing space based communication and earth observation services, building launch vehicles through Indian industry to meet the customers' demand providing launch service to Indian and international customers technology transfer to Indian industry, etc.

Indian Institute of Space Science and Technology

Towards capacity building in human resources and to meet the growing demands of the Indian Space Programme, the Indian Institute of Space Science and Technology (11 ST), a deemed university, was established at Thiruvananthapuram in 2007.

Earth Sciences

Earth system sciences deal with all the five components of the earth system, viz., atmosphere, hydrosphere, cryosphere, lithosphere and biosphere and their complex interaction. The Ministry of Earth Sciences (MoES) holistically addresses all the aspects relating the earth system science for providing weather, climate, ocean, coastal state, hydrological and seismological services. The services include forecasts and warnings for various natural disasters. The services provided are being effectively used by different agencies and state governments for saving human lives and minimising damages due to natural disasters.

Website: www.moes.gov.in

Earth System Science Organisation

The Earth System Science Organisation (ESSO) operates as an executive arm of the MoES for its policies and programmes. It provides overall direction for the centres/units and reviews the implementation of the programmes. The ESSO was established in 2007 as a virtual organisation, bringing all meteorological and ocean development activities under one umbrella, recognising the importance of strong coupling among various components of the earth, viz., atmosphere, oceans, cryosphere and geosphere. It has four major branches of earth sciences: (i) ocean science and technology; (ii) atmospheric and climate science; (iii) geo-science and technology; and (iv) polar science and cryosphere. The sole purpose of the endeavour was to address holistically various aspects relating to earth processes for understanding the variability of earth system. The organisation is primarily aimed to develop and improve capability to forecast weather, climate and hazard related phenomena for social, economic and environmental benefits including addressing aspects relating to climate change science, and climate services. ESSO is also responsible for development of technology towards the exploration and exploitation of marine resources in a sustainable way for the socio-economic benefit of the society by taking into account the global developments in the field of marine environment. One of the mandates of ESSO is also to promote research in polar science of both Antarctic and Arctic regions to understand the various phenomenon and processes of these regions on global climate and weather, in particularly on the Indian Ocean.

ESSO functions through its following centres: Centre for Marine Living Resources and Ecology (CMLRE); National Centre of Coastal Research (NCCR); National Centre for Seismology (NCS); National Centre for Medium Range Weather Forecasting (NCMRWF); India Meteorological Department (IMD); National Institute of Ocean Technology (NIOT); Indian National Centre for Ocean Information Services (INCOIS); National Centre for Polar and Ocean Research (NCPOR); Indian Institute of Tropical Meteorology (IITM); and National Centre for Earth Science Studies (NCESS).

Atmospheric and Climate Research

A high resolution global deterministic weather prediction model was commissioned for generating operational weather forecasts at a horizontal resolution of 12 km. With this, MoES has attained the same capability as in USA in using high resolution weather prediction models. Many major improvements have been made in data assimilation for the ingestion of data from the Indian and International satellites in numerical models. Under the Monsoon Mission, operational dynamical model systems have been implemented for extended range and seasonal forecasts. For the first time, forecasts on different time-scales during the hot weather season (April to May) including heat waves were issued by the India Meteorological Department.

Agro-Meteorological Advisory Services

The Ministry in collaboration with the Indian Council of Agricultural Research (ICAR) provides the Agromet Advisory Services (AAS) for the benefit of farmers. Farmers make use of these services for planning the operations like sowing, irrigation, application of fertiliser and pesticide, harvest and protection of crops from weather disasters. The services carried out at 130 agro-met zones (cluster of 4-6 districts) now have been successfully extended to the district level and operated across 608 districts of the country. Currently, about 21.69 million farmers are receiving crop-specific agro-meteorological advisories in vernacular languages.

Forecasts for Heat and Cold Waves

With global warming, surface air temperatures are expected to further increase and frequency of heat waves may also increase. To provide adequate warnings about heat waves and associated health hazards, MoES for the first time started issuing forecasts for heat waves over the country. A few state governments like Gujarat, Andhra Pradesh, Maharashtra and Odisha have initiated state action plans based on these forecasts during the hot weather season, which could help them to warn people in advance about the occurrence of heat waves and thus saving their lives. MoES has also taken initiative to develop such heat wave action plans with other state governments.

A Global Ensemble Forecast System (GEFS) for short and medium range prediction at 12 km using 21 members of the model was commissioned in 2018. Improvements have been made in the Data

Assimilation system for assimilation of newer observations, including Indian satellite observations. During 2018, six tropical cyclones against the normal frequency of 4.5 cyclones formed over North Indian Ocean (NIO). The World Meteorological Organisation (WMO) appreciated IMD for tropical cyclone advisory services during Cyclonic Storm Sagar over Arabian Sea (16-21 May), Extremely Severe Cyclonic Storm Mekunu over Arabian Sea (21-27 May), VSCS Luban (6-15 October) and VSCS Titli (8-13 October), which helped minimise the impact and saved many lives.

A new early warning system of air quality in Delhi was developed in collaboration with National Centre for Atmospheric Research (NCAR), USA. The system will assimilate data from around 36 monitoring stations and satellite data on stubble burning and dust storms. These warning services were provided to Central Pollution Control Board (CPCB). India Meteorological Department and Power System Operation Corporation Limited (POSOCO) launched a web portal dedicated exclusively to the energy sector. The Mumbai Weather Live Mobile App was developed by collating ground weather observations recorded by IMD and the Municipal Corporation of Greater Mumbai, observations from SAFAR-Mumbai, to provide live location-specific information on rainfall over the Mumbai City. Currently, the app covers about 100 sites spread across Mumbai city, suburban areas, Navi Mumbai and the surrounding areas.

Ocean Services, Technology, Observations, Resources Modelling and Science

Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART), has been put in place for the period 2017-18 to 2019-20. The scheme encompasses 16 sub-projects addressing ocean development activities such as services, technology, resources, observations and science. The services rendered under it will provide economic benefits to a number of user communities in the coastal and ocean sectors, namely, fisheries, offshore industry, coastal states, defence, shipping, ports, etc. Currently, five lakh fishermen are receiving this information daily through mobile which includes allocation of fish potential and local weather conditions in the coastal waters. Implementation of O-SMART will help in addressing issues relating to

Sustainable Development Goal-14, which aims to conserve use of oceans, marine resources for sustainable development. This scheme also provides necessary scientific and technological background required for implementation of various aspects of Blue Economy. The state-of-the-art early warning systems established under the O-SMART help in effectively dealing with ocean disasters like tsunami, storm surges, etc.

Atmospheric and Climate Research, Observations Science Services

Atmospheric and Climate Research, Observations Science Services (ACROSS) pertains to the atmospheric science programmes of the Ministry. Its objective is to provide reliable weather and climate forecast for betterment of society. It also aims at improving skill of weather and climate forecast through sustained observations and intensive R & D. It is being implemented by the Ministry through its institutes namely India Meteorological Department (IMD), Indian Institute of Tropical Meteorology (IITM), National Centre for Medium Range Weather Forecasting (NCMRWF), and Indian National Centre for Ocean Information Service (INCOIS). The scheme will provide improved weather, climate and ocean forecast and services, thereby ensuring transfer of commensurate benefits to the various services like public weather service; disaster management; agro-meteorological services; aviation services; environmental monitoring services; hydro-meteorological services; climate services; tourism; pilgrimage; power generation; water management; sports and adventure, etc. This scheme addresses different aspects of weather and climate services, which include warnings for cyclone, storm surges, heatwaves, thunderstorms, etc. Each of these aspects is incorporated as nine sub-schemes under the umbrella scheme ACROSS and is implemented in an integrated manner through the aforesaid four institutes.

IMD augmented its observational network to further improve forecast skill. Some of the major augmentation efforts include the commissioning of the S-Band Doppler Weather Radar at Goa, indigenously developed GPS-based pilot sonde at New Delhi, indigenously developed Drishti Runway Visibility Range (RVRVAutomatic Weather Observing System (AWOS) systems at 8 airports, a new Meteorological Observatory at Meteorological Centre Amravati (capital of Andhra Pradesh). A new Cyclone Warning Centre was also established at Thiruvananthapuram,

Kerala in October 2018 to provide cyclone alerts and warnings for of Kerala and Karnataka. The lightning location network, which was set up over Maharashtra has been expanded to other parts of the country with the induction of 28 additional sensors. A mobile App named "DAMINI" has been developed to disseminate the information on lightning to the public. The field campaign namely the Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX) Phase-IV campaign was conducted near Solapur in Maharashtra to understand the physical process involved in enhancement of precipitation. About 240 hours of aircraft observations were taken during the field campaign. The third phase of the winter fog experiment at Indira Gandhi International Airport (IGIA), New Delhi and Hissar, was also conducted. High quality observations on fog events have been collected from this field campaign.

Ocean Services: Technology and Observations

Potential Fishery Zone (PFZ) Advisories

The Indian National Centre for Ocean Information Services (INCOIS) provides PFZ advisories to 2.75 lakh fishermen on a daily basis to help them to easily locate the areas of abundant fish in the ocean.

Ocean Forecasts

Ocean state forecastes (forecasts of waves, currents, sea surface temperature, etc.) to fisher folk, shipping industry, oil and natural gas industry, navy, coast guard and other stakeholders have improved considerably. Oil spill advisories are being provided to facilitate the indication of eco-sensitive zones, potential fishing zones, fishing avoidance zone during the event of oil spill. The ocean state forecasts were also provided before and during the launch day of Re-usable Launch Vehicle Technology Demonstration (RLV-TD) of the Indian Space Research Organisation (ISRO).

The ocean forecast services were extended to two other Indian Ocean Rim countries, namely, Sri Lanka and Seychelles on various parameters, viz., winds, waves, currents and temperature in map form served under the umbrella of Regional Integrated Multi-Hazard Early Warning System (RIMES) for Afro-Asian Region.

Tsunami Warning System

The Indian Tsunami Warning System established by the Ministry at the Indian Centre for Ocean Information Services (INCOIS), Hyderabad, has been recognised as the Regional Tsunami Service Provider (RSTP) for the Indian Ocean region by UNESCO to provide warning to countries of the Indian Ocean. This includes the service of level-2 Tsunami advisories for the Indian Ocean. The Indian Tsunami Warning System is equipped to issue warnings within ten minutes of occurrence of earthquakes. The Indian Tsunami Early Warning Centre (ITEWC) kept the watch of all tsunamigenic earthquakes in and around the Indian Ocean and issued appropriate messages in the event of any threats from potential tsunamis.

Open Cage Culture

Large scale fish production through mariculture is the viable alternative to cope with the ever-increasing demand for fish proteins. An open sea cage culture mooring system was designed and developed for commercially important marine finfishes suitable for Indian sea conditions to meet this demand with available marine engineering and biological expertise. The open sea cage culture technology seems to be an ideal alternative livelihood option for the coastal fishers, help generate considerable employment opportunities in the country and to meet the fish food production targets of the nation.

Remotely Operated Vehicle

Indigenously developed 500m depth rated shallow water/polar remotely operated vehicle (PROVe) was successfully deployed in the Andaman coral islands. The vehicle was successfully maneuvered in the undulating reef terrain to record high quality underwater visuals of coral reef biodiversity with spectral irradiance.

Polar and Cryosphere Research (PACER)

National Centre for Antarctic and Ocean Research (NCAOR), Goa established a high altitude research station in Himalaya called Himansh (literally meaning, a slice of ice), situated above 13,500 ft (>4000 m) at a remote region in Spiti, Himachal Pradesh. This station is equipped with instruments such as automatic station, water level recorder, steam drill, snow ice corer, ground penetrating radar, differential global positioning system, snow fork, flow tracker, thermister string, radiometer, etc. Water level recorders were installed at five locations along the stretch of 130

km of Chandra river in western Himalaya for hydrological balance/modeling. Glaciers were monitored for mass balance, dynamics, energy balance and hydrology.

Seismology and Geoscience Research (SAGE)

The national seismological network consisting of 115 observatories has been functioning smoothly. Information pertaining to significant earthquake events were transmitted to all concerned state and central government agencies, dealing with relief and rescue operations in the region and also posted on the website. Scientific deep drilling in Koyna which started in 2016 is aimed at setting up of borehole observatory(s) at depth for directly measuring the in-situ physical properties of the rocks, pore-fluid pressure, hydrological parameters, temperature and other parameters of an intra-plate, active fault zone in the near field of earthquakes— before, during and after their occurrence, leading to a better understanding of the mechanics of faulting, physics of reservoir triggered earthquakes and preparing a predictive model.

Research, Education and Training Outreach Programme

Research, Education and Training Outreach (REACHOUT) Programme is a scheme that provides support to academic/research organisations in various sectors of earth system sciences including technology development.

The main objectives of this programme are: (i) to support various R&D activities in the thrust areas of different components of earth system sciences that are theme and need based; and (ii) to provide training and create awareness amongst the public, students, academicians and user communities about the various fields of earth system science.

Biotechnology

Realising the tremendous potential of biotechnology in improving human and animal health and productivity, and enhancing agricultural activity, the government set up a multi-agency board namely National Biotechnology Board (NBTB) way back in 1982 with participation of DST, UGC, ICMR and CSIR to promote activities in biotechnology. Subsequently, the National Board was upgraded to a full-fledged Department of Biotechnology (DBT) under the Ministry of Science and

Technology in 1986. This provided the much-needed impetus to biotechnology and the Department conceived programmes and formulated integrated programmes in line with its allocation of business rules.

DBT has infused fresh momentum to the developments in modern biology and biotechnology. The Department, in the past 30 years, has witnessed discerned maturation from a nascent sector to a sunrise industry, making outstanding achievements in the growth and application of and susceptibility of bio-resources and environment and also towards fostering among the major biotech destinations in the world and ranks third in the Asia-Pacific region. India has the second-highest number of US Food and Drug Administration (USFDA) approved plants, after the USA.

DBT has always laid emphasis on promotion of excellence and innovation for discovery; early and late stage translational research in varous sectors including agriculture; affordable healthcare and medical technology; food and nutritional security; animal biotechnology; environmental safety; clean energy and bio-fuel; bio-manufacturing, etc. Innovation-driven research in biotechnology and modern biology is being facilitated and supported by the Department through its various schemes across the country. Building capacity in cutting edge areas of research, developing right kind of infrastructure, building new national and international partnership are some of the thrust areas of the Department. At the same time, impetus is on developing products and their commercialisation for robust bio-economy and establishment of India as a world-class bio-manufacturing hub for developing and developed markets in near future.

To infuse momentum in the growth of Biotechnology sector in the country, DBT has formulated the National Biotechnology Development Strategy in consultation with the various stakeholders including scientists, educators, policy makers, leaders of industry and civil society, voluntary and non-governmental organisations, regulators and international experts. The strategy emphasizes on the need for building a skilled workforce and leadership through specialised training programmes for professionals to facilitate technology competence, creating new career options for students aimed at motivating young

minds towards biotechnology, supporting faculty improvement programme for continuous improvement and attracting skills for imbibing scientists and post docs. Establishing core facilities and instrumentation, creating specialised centres in and around existing institutes, strengthening core capacities in the existing institutes, establishing new theme-based institutes and creation of data centres and repositories are also key components of this strategy. This also includes enhancement of research opportunities to provide sustained support to basic research, promote multi-disciplinary research in biology, attract non-biologists to address biological questions; encourage emerging technologies and foster global and national alliances. The focus of the strategy is also on nurturing innovation and entrepreneurship to embed translational capacity in all major research centres and institutes; provide support for business incubation, technology validation and scale-up infrastructure; promote public-private partnership; and setting up of bio-clusters.

Also from the time the Covid-19 struck in 2019-20, the DBT has been engaged relentlessly to contribute to mitigate the crisis.

Website: www.dbtindia.gov.in

Autonomous Institutions

DBT being a visionary in biotech research and promotion established 16 autonomous institutes for pursuing research in various disciplines of biotechnology in the specialised areas of agriculture and allied science, healthcare, animal sciences, environment, and industry engaged in the theme-based research with the projects sponsored by the national and the international agencies. More than 80 technologies developed under the efforts of autonomous institutes and many of them have been commercialised through technology transfer. The autonomous institutes of DBT have several research leads including IPR/patents.

National Institute of Immunology (NII), New Delhi continued expansion of scientific programmes in a multi-investigators driven mode to address challenging questions in biology for improvement of healthcare. It also promotes state-of-the-art teaching and training facilities in advanced biological sciences using an inter-disciplinary approach so as to inculcate the highest level of aptitude and ability in the country's skilled manpower pool.

National Centre for Cell Sciences (NCCS), Pune has taken new initiatives in nurturing young scientific talent and research scholars into its Ph.D. programme dealing with cutting-edge research areas in structural biology, stem cell biology, deciphering the role of RNA in biological control processes and the cellular and molecular basis of memory.

Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad is well equipped with world-class state-of-the-art instrumentation and computing infrastructure to facilitate working in frontier areas of research in life sciences. It provides services for agricultural and processed food products for testing purity of samples of agricultural commodity using DNA markers that can distinguish different Basmati varieties and also traits identification and validation. The major areas of research in the institute are centred around cell signalling, transcription, structural biology, computational biology and bioinformatics, immunology, genetics and molecular pathogenesis.

Institute of Life Sciences (ILS), Bhubaneshwar focuses on infectious disease biology, gene function and regulation and translational research. It has state-of-the-art infrastructural facilities for cutting-edge multi-disciplinary research in frontier areas of life sciences.

National Brain Research Centre (NBRC), Manesar is pursues inter-disciplinary research and teaching on epilepsy and brain mapping. The focus of the Institute is on generation of skilled manpower in brain research that would help India to achieve international leadership in this frontier area of science.

National Institute of Plant Genome Research (NIPGR), Delhi focuses on research on understanding of the structure, expression and function of genes along with arrangement of genes on plant genomes and manipulation of plant genes/genomes to breed improved varieties of food and industrial crops for high yields and of better quality products. It is making attempts to translate some of the technologies developed through basic research activities for their application in agriculture.

Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram has been working on research programme on chronic disease biology, tropical disease biology and disease biotechnology.

Institute of Bio-resources and Sustainable Development (IBSD), Imphal is involved in conservation and sustainable utilisation of bio-resources for the socioeconomic development of the north-eastern region. The Institute has taken initiatives in collaborations with other institutions/organisations/universities nationally and internationally relevant to the bio-resources for sharing and sustainable exploitation.

Centre of Innovative and Applied Bio-processing (CIAB), Mohali focuses on secondary agriculture and catalyzing research, innovations and knowledge translation for production of secondary agricultural bio-products. The Institute is currently involved in processing of agri-farm and food industry spare biomass through chemical, biological and biotechnological approaches and engaged in transmitting knowledge and leads of bio-resources for productive processing and value additive primary and secondary agriculture bio-products for edible and non-edible usage.

National Institute of Biomedical Genomics (NIBMG), Kalyani is engaged in accelerating genomics for health and disease and discovering genomic evidence that underpins disease and health-related traits. It is pursuing projects on discovery of biological and environmental correlations of pre-term birth and study natural histories of diseases and health-related traits.

Regional Centre for Biotechnology (RCB), Faridabad is providing world-class education, training and conducts innovative research at the interface of multiple disciplines to create high quality human resource in disciplinary and inter-disciplinary areas of biotechnology in a globally competitive research milieu.

Translational Health Science and Technology Institute (THSTI), Faridabad is working on integrated approach in the field of medicine, science, engineering and technology into translational knowledge and making biomedical innovations accessible to public health. The Institute plays a pivotal role in NCR biotech science clusters and targeting at specialising in translational research and related endeavours.

National Institute of Animal Biotechnology (NIAB), Hyderabad has taken initiatives on infectious diseases like brucellosis, theileriosis, babesiosis, newcastle disease virus (NDV), leptospirosis, toxoplasmosis,

mastitis, peste des petitsruminants virus (PPR) and foot and mouth disease (FMD) and development of new tools for diagnosing and preventing the diseases.

Institute of Stem Cell Science and Regenerative Medicine (InStem), Bengaluru has successfully attracted outstanding investigators, who have initiated theme driven programmes. A key focus is given to support young investigators through a fellowship programme in stem cell research and applications.

National Agri Food Biotechnology Centre (NABI), Mohali is engaged in research programmes and technologies for the biotech cluster at Mohali to make Indian agriculture and food industry more innovation-driven, remunerative and sustainable. It is providing sustainable and meaningful answers towards quality nutrition and provides multiple biotechnological and inventive products in agriculture and food sector.

International Centre for Genetic Engineering and Biotechnology (ICGEB), Delhi is endeavouring to bring excellence in genetic engineering with collaborative partnership of scientists from all over the world. The Centre is engaged in conducting training programme on discovery of new drugs against malaria and micro RNAs in plant development and stress management. The broad research areas are malaria, virology, immunology, recombinant gene products, structural and computational biology, plant molecular biology, insect resistance, plant transformation and synthetic biology and bio-fuels.

Industrial and Entrepreneurship Development

Under Industrial and Entrepreneurship Development schemes, the Department supported translational research and public private partnership programme including bio-incubators and biotech parks.

Biotechnology Parks and Incubators

The Department of Biotechnology promotes biotech research and helps to translate research into products and services. One of the means by which development of new commercial products is to be achieved is through setting up biotechnology parks, where facilities for technology incubation, technology demonstration and pilot plant studies are provided for accelerated commercial development of biotechnology. The

Department in partnership with state governments/state government organisations/central government organisations has established biotechnology parks and incubators in diffferent parts of the country to facilitate biotech product development, entrepreneurship, research and innovation.

Bangalore Life Science Cluster for Multi-scale Basic and Applied Research in Biological Sciences (B-Life), Bengaluru promotes research and technology development through generation of ideas, sharing resources and infrastructure amongst the partnering institutes. The cluster partnering institutes are: Institute for Stem Cell Science and Regenerative Medicine (inStem), National Centre for Biological Sciences (NCBS), Centre for Cellular and Molecular Platforms (C-CAMP), and Institute of Bioinformatics and Applied Biotechnology (IBAB). The clusters are engaged in establishment of innovative institutional model for cutting-edge scientific research, where existing centres of excellence are used for the development of new centres with challenging new mandates.

NCR Biotech Science Cluster is established by involving five autonomous institutes of DBT (NII, NIPGR, NBRC, THSTI and RCB). The Cluster is supporting discovery-driven research in biology and developments of novel technologies and facilitation of public-private partnerships through biotech business incubators and parks. It creates network with the potential constituent institutions to bring synergistic ecosystem for accelerating discoveries.

Public Sector Undertakings

The Department has promoted new industry academia interface and is stimulating strategic research and innovation capabilities of the Indian biotech industry, particularly start-ups and SMEs, for creation of affordable products addressing the needs of the largest section of society. As an interface agency Biotechnology Industry Research Assistance Council (BIRAC) has been set up to foster innovation and entrepreneurship, promote affordable innovation in key social sectors, empowerment of start-ups and small and medium enterprises, contribute through partners for capability enhancement and diffusion of innovation, enable commercialisation of discovery and ensure global

competitiveness of Indian enterprises. BIRAC has initiated partnerships with several national and global partners to collaborate and deliver the salient features of its mandate. Biotech Ignition Grant (BIG) scheme under BIRAC is encouraging scheme for the young investigators for entrepreneurial and managerial development of SMEs in biotechnology through incubators.

The Department is also having two PSUs namely Bharat Immunologicals and Biologicals Corporation Limited (BIBCOL) and Biotechnology Industry Research Assistance Council (BIRAC). BIBCOL is a leading biotechnology company based in Uttar Pradesh, currently manufactures and produces a range of pharmaceutical products such as Oral Polio Vaccines (OPV Vaccine), zinc tablet and diarrheal management kit, etc. Its mission is to save the lives of millions of children from avoidable disability, through polio vaccination. BIRAC is a not-for-profit Section 8, Schedule B, public sector enterprise, set up as an interface agency to strengthen and empower the emerging biotech enterprise to undertake strategic research and innovation, addressing nationally relevant product development needs.

BIRAC is a new industry-academic interface and implements its mandate through a wide range of impact initiatives, be it providing access to risk capital through targeted funding, technology transfer, IP management and handholding schemes that help bring innovation excellence to the biotech firms and make them globally competitive. In its three years of existence, BIRAC has initiated several schemes, networks and platforms that help to bridge the existing gaps in the industry-academia innovation research and facilitate novel, high-quality affordable products development through cutting edge technologies.

26 Transport

A well-knit and coordinated system of transport plays an important role in the sustained economic growth of country. The present transport system of the country comprises several modes of transport including rail, road, coastal shipping, air transport etc. Transport has recorded a substantial growth over the years both in spread of network and in output of the system. The Ministry of Shipping and the Ministry of Road Transport and Highways are responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and the civil aviation.

Railways

The Railways in India provide the principal mode of transportation for freight and passengers. It brings together people from the farthest corners of the country and makes possible the conduct of business, sightseeing, pilgrimage and education. The Indian Railways (IR) have been a great integrating force during the last more than 165 years. It has bound the economic life of the country and helped in accelerating the development of industry and agriculture. From a very modest beginning in 1853, when the first train steamed off from Mumbai to Thane, a distance of 34 kms, Indian Railways have grown into a vast network of 7,321 stations spread over a route length of 67,415 km with a fleet of 12,147 locomotives, 67,597 passenger service vehicles, 6,406 other coaching vehicles and 2,89,185 wagons. The growth of Indian Railways in the 165 years of its existence is thus phenomenal. It has played a vital role in the economic industrial and social development of the country. The network runs multi-gauge operations extending over 67,415 route kilometers.

The size of IR's fleet of locomotive stock in March 2019, consisted of 39 steam, 6,049 diesel and 6,059 electric locomotives. As on March 31, 2019, the size of IR's wagon fleet consisted of 2,89,185 units—67,566 covered, 1,65,254 open high-sided, 1 7,049 open low-sided, 24,663 other types and 14,653 brake vans/ departmental wagons. About 1,029 old

coaches were given mid-life rehabilitation which brought substantial improvement in the condition of flooring, toilets and other passenger amenities. Forty-two loco sheds and 214 carriage and wagon sick lines and central repair depots provide repair and maintenance facilities for the entire fleet of rolling stocks. About 50.91 per cent of the route kilometre, 61.62 per cent of running track kilometre and 62.30 per cent of total track kilometre is electrified. The network is divided into 17 zones. Divisions are the basic operating units. The 17 zones and their respective headquarters are given on the following page:

Zonal Railways	**Headquarters**
Central	Mumbai
Eastern	Kolkata
East Coast	Bhubaneshwar
East Central	Hajipur
Northern	New Delhi
North Central	Prayagraj
North Eastern	Gorakhpur
Northeast Frontier	Maligaon (Guwahati)
North Western	Jaipur
Southern	Chennai
South Central	Secunderabad
South Eastern	Kolkata
South East Central Railway	Bilaspur
South Western Railway	Hubbali (Hubli)
Western	Mumbai
West Central Railway	Jabalpur
Metro Railway	Kolkata

The main objectives of railways planning have been to develop the transport infrastructure to carry the projected quantum of traffic and meet the developmental needs of the economy. Since the inception of the planned era in 1950-51, Indian Railways have implemented several five-year plans, apart from annual plans in some years. During the plans, emphasis was laid on a comprehensive programme of system modernisation. With capacity being stretched to its limits, investments of cost-effective technological changes have become inescapable in order to

meet the ever-increasing demand for rail transport. Along with the major thrust directed towards rehabilitation of assets, technological changes and upgradation of standards were initiated in important areas of track, locomotives, passenger coaches, wagon bogie designs, signalling and telecommunication.

Website : www.indianrailways.gov.in

Central Public Sector Enterprises

There are 13 undertakings under the administrative control of the Ministry of Railways, viz., (i) RITES Ltd.; (ii) IRCON International Limited; (iii) Indian Railway Finance Corporation Limited (IRFC); (iv) Container Corporation of India Limited (CONCOR); (v) Konkan Railway Corporation Limited (KRCL); (vi) Mumbai Railway Vikas Corporation Limited (MRVC); (vii) Indian Railway Catering & Tourism Corporation Ltd. (IRCTC); (viii) Railtel Corporation of India Ltd. (Rail Tel); (ix) Rail Vikas Nigam Ltd. (RVNL); (x) Dedicated Freight Corridor Corporation of India Limited (DFCCIL); (xi) Bharat Wagon and Engineering Co. Ltd. (BWEL); (xii) Burn Standard Company Limited (BSCL); and (xiii) Braithwaite and Company Limited (BCL).

Research and Development

The Research Design and Standards Organisation (RDSO) at Lucknow is the R&D wing of Indian Railways. It functions as a consultant in technical matters. It also provides consultancy to other organisations connected with railway manufacture and design. RDSO has developed a new design of wider and heavier pre-stressed concrete sleeper RT-8527 for 25 T axle load to achieve higher frame resistance against bucking, higher rubber pad life, and feasibility of reducing de-stressing temperature with likely reduction in rail/weld failures.

Railway Finance

Though a part of the overall financial figures of the Government of India, the Railway Budget was being presented separately to Parliament since 1924-25 owing to the Separation Convention of 1924. The Railways had its own 16 demands for grants, which also used to be considered and passed by the Parliament separately. The main reason behind the Separation Convention was to secure stability for civil estimates as the Railway finance used to be a sizeable part of the general finances. The

government decided to merge the Railway Budget with the General Budget from the 2017-18. The unified budget brings the affairs of the Railways to centre stage and presents a holistic picture of the financial position of the government. This merger would facilitate multimodal transport planning between highways, railways and waterways.

Railways would continue to maintain its distinct entity as a departmentally run commercial undertaking and retain its functional autonomy, delegation of financial powers etc. as per the existing guidelines. Instead of the erstwhile scheme of sixteen demands for grants, the Ministry of Finance introduced one demand for grant for the Ministry of Railways.

Railway Electrification

With a view to reduce the dependence on imported petroleum-based energy and to enhance energy security to the country as well as to make the railway system more eco-friendly and to modernise the system, Indian Railways has been progressively electrifying its rail routes. In pre-independence period, electrification remained confined to 388 Route Kilometers (RKMs) and it is only in the post independence period that further electrification was taken up. Since then, there has been no looking back and the Indian Railways has slowly but steadily electrified its routes. By March 2019, electrification was extended to 34,319 RKMs out of the total rail network of 67,415 RKMs. This constitutes 50.91 per cent of the total railway network.

Catering Services

New Catering Policy 2017 was issued in 201 7 with the objective to provide quality food to rail passengers by unbundling of catering services on trains. IRCTC has been mandated to carry out the unbundling by creating a distinction primarily between food preparation and food distribution. In order to upgrade quality of food, IRCTC has to set up new kitchens, upgrade existing ones and manage catering service on all mobile units.

Rail Tourism

IR is the prime mover of tourism in the country by connecting various tourist destinations across the country by rail. In addition, it has taken several initiatives to promote tourism such as operation of tourist

trains/coach services on popular tourist circuits in different regions of the country, offering tour packages inclusive of rail travel, local transportation, accommodation, onboard services like catering, off-board services such as conducted tours, etc. The important train/coach services offering package tours are: (i) Luxury Tourist trains; (ii) Semi-luxury trains; (iii) Buddhist Special trains; (iv) Bharat Darshan trains; (v) Astha Circuit trains; (vi) Glass Top (Vistadome) Coaches; (vii) Steam Train; (viii) Value Added Tour Packages; and (ix) Rail Tour Packages. Railways has been operating the luxury tourist train 'Palace on Wheels' since 1982. Four more trains namely 'Deccan Odyssey', 'Golden Chariot', 'Heritage Palace on Wheels' and 'Maharajas' Express' on similar lines have been added over the years. All these trains are fully air-conditioned and self-sufficient to take care of all the requirements of the passengers for their mostly one week voyage but some with shorter trips too. Each train is developed on a different theme based on the culture and heritage of India. Each train provides modern amenities and comforts. The train comprises saloons of different types, multi-cuisine restaurants, lounge, bar/mini bar, gym, spa, conference room, etc. Onboard facilities include individual temperature control, TV, WiFi internet, telephone, piped music, CCTV, money changer, laundry, etc. The facilities may slightly vary from train to train.

Roads

The Ministry of Road Transport and Highways was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent ministries. Road transport is a critical infrastructure for economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Road Transport and Highways is the apex body for formulation and administration of the rules, regulations and laws relating to road transport and transport research. It encompasses construction and maintenance of national highways (NHs); administration of Motor Vehicles Act, 1988 and Central Motor Vehicles Rules 1989; National Highways Act, 1956 and National Highways Fee (Determination of Rates and Collection) Rules, 2008; formulation of broad policies relating to road transport, environmental issues, automotive norms, etc., besides making arrangements for movement of vehicular traffic with

neighbouring countries. The capacity of national highways in term of handling traffic (passenger and goods) needs to be in tandem with the industrial growth. India has about 58.98 lakh kms of road network, which is the second largest in the world. This comprises national highways, expressways, state highways, major district roads, other district roads and village roads. The break-up is: national highways/expressways-1,34,380 kms; state highways-1,54,814 kms; other roads-56,08,477 kms totalling to 58,97,671 kms. The Ministry has been entrusted with the responsibility of development and maintenance of national highways (NHs). All roads other than national highways in the states fall within the jurisdiction of respective state governments. In order to assist the state governments in the development of state roads, central government also provides financial assistance out of the Central Road Fund (CRF) and Inter State Connectivity and Economic Importance (ISC & El) Scheme.

The NHDP was mainly being implemented by National Highways Authority of India (NHAI) and National Highways and Infrastructure Development Corporation Ltd. (NHIDCL), and is spread over seven phases with an estimated expenditure of about ₹ 6,00,000 crore. Some of the major National Highways constructed under this programme include Golden Quadrilateral (GQ) connecting 4 major metropolitan cities, viz., Delhi-Mumbai-Chennai-Kolkata, North-South & East-West Corridors (NS-EW) connecting Srinagar to Kanyakumari and Silchar to Porbandar with a spur from Salem to Cochin, road connectivity of major ports of the country to national highways. The remaining works under NHDP have now been subsumed under the Ministry's new flagship programme — Bharatmala.

Website: www.morth.nic.in

Development and Maintenance of National Highways

The government is implementing National Highways Development Project (NHDP), the largest Highways Project ever undertaken in the country since 2000. The NHDP is mainly being implemented by National Highways Authority of India (NHAI) and National Highways & Infrastructure Development Corporation Ltd. (NHIDCL).

Bharatmala Pariyojana

The Ministry has taken up detailed review of NHs network with a view to develop the road connectivity to border areas, development of

coastal roads including road connectivity for non-major ports, improvement in the efficiency of national corridors, development of economic corridors, inter corridors and feeder routes along with integration with Sagarmala, etc., under Bharatmala Pariyojana. The Bharatmala Pariyojana envisages development of about 26,000 km length of economic corridors, which along with Golden Quadrilateral (GQ) and North-South and East-West (NS-EW) Corridors are expected to carry majority of the freight traffic on roads. Further, about 8,000 km of inter corridors and about 7,500 km of feeder routes have been identified for improving effectiveness of economic corridors, GQ and NS-EW Corridors. The programme envisages development of Ring Roads/bypasses and elevated corridors to de-congest the traffic passing through cities and enhance logistic efficiency; 28 cities have been identified for Ring Roads; 125 choke points; and 66 congestion points have been identified for their improvement.

The network identified under the Pariyojana has been further optimised to improve connectivity across key economic centres through discussions with all stakeholders. The principle of shortest distance has been followed in identification and determination of green-field alignments for connecting important economic centres to reduce the overall costs as compared to upgradation of the brown-field/existing alignments, as the shorter green-field alignments enable significant reduction both in capital cost and vehicle operating cost over time.

Setu Bharatam

In order to ensure safe and smooth flow of traffic, the Ministry has envisaged a plan for replacement of level crossing on national highways by Road Over Bridges (ROBs)/Road Under Bridges (RUBs) under a scheme known as Setu Bharatam.

Char Dham Mahamarg Vikas Pariyojana

This project envisages development of easy access to the four prominent Dhams, namely, Gangotri, Yamunotri, Kedarnath and Badrinath, situated in Uttarakhand. These four Dhams are prominent pilgrimage centres. The project entails development of 889 km of roads with configuration of two-lane with paved shoulders.

National Highways Authority of India

The National Highways Authority of India (NHAI) was set up under the NHAI Act, 1988. It has been entrusted with National Highways Development Project (NHDP), which along with other minor projects, has vested in it 50,329 kms of national highways for development, maintenance and management. Its objective is to ensure that all contract awards and procurements conform to the best industry practices with regard to transparency of process, adoption of bid criteria to ensure healthy competition in award of contracts, implementation of projects conform to best quality requirements and the highway system is maintained to ensure best user comfort and convenience. National highways are the arterial roads of the country for inter-state movement of passengers and goods. They traverse the length and width of the country connecting the national and state capitals, major ports and rail junctions and link up with border roads and foreign highways. The total length of NH (including expressways) in the country is 1,32,499 kms. While highways/expressways constitute only about 1.7 per cent of the length of all roads, they carry about 40 per cent of the road traffic.

NHAI is entrusted to among others: develop, maintain and manage national highways vested in it; collect fees on national highways, regulate and control the plying of vehicles for its proper management; develop and provide consultancy and construction services in India and abroad and carry on research activities in relation to the development, maintenance and management of highways or any other facilities there at; and advise the central government on matters relating to highways, etc.

Website: www.nhai.gov.in

National Highways Development Project

The National Highways Development Project (NHDP) is a project to upgrade, rehabilitate and widen major highways in the country to a higher standard. The project was started in 1998. This project is managed by NHAI under the Ministry of Road Transport and Highways. It represents 49,260 km of roads and highways work and construction in order to boost economic development of the country. The NHDP has been subsumed in the ongoing Bharatmala project.

National Highways & Infrastructure Development Corporation

The NHIDCL is a fully owned company of the Ministry that exclusively carries out the task of construction/upgrading/widening of national highways in parts of the country which share international boundaries with neighbouring countries in order to promote regional connectively with neighbouring countries on a sustainable basis.

Indian Academy of Highway Engineers

Indian Academy of Highway Engineers (IAHE) is a registered society under the administrative control of the Ministry. It is a collaborative body of both central and state governments and was set up in 1983 with the objective of fulfilling the long felt need for training of highway engineers in the country, both at the entry level and during the service period.

Major Initiatives

National highways constitute just 2 per cent of the country's road network but carry 40 per cent of the traffic load. The government is working hard to augment this infrastructure both in terms of length and quality. There are plans to expand the network of national highways so that all parts of the country have an easy access to it. The North-East region, backward and interior areas, border connectivity roads, coastal roads and economically important routes are being given special attention in terms of building road connectivity. The Ministry has eased several norms and polices for aqcuiring land, felling tree, risk balancing, reviving old projects, etc.

National Registry of Vehicle and License Records

In order to usher in transformational improvements in this sector, the Ministry has put in place several policies for citizens. Transport Mission Mode Project has successfully automated RTO operations, set up a consolidated transport database. Along with it, a host of citizen and trade-centric applications have also been implemented. The salient aspects of this Mission Mode Project are two flagship applications—Vahan and Sarathi. While Vahan consolidates vehicle registration, taxation, permit, fitness and associated services across the country, Sarathi looks after the driving license, learner licence, driving schools and related activities. This has been implemented in more than 1,000 RTDs across 13 states/UTs with state-specific rules, tax structure, etc.

The database is integrated with Aadhaar for biometric authentication and eKYC, integration with digilocker. This allows use of virtual documents like driving license, registration certificates, permits, etc., as authorised soft copies.

Road Safety

The government has approved a National Road Safety Policy so as to minimise road accidents. It outlines various measures such as promoting awareness; establishing road safety information database; identification and rectification of road accident black spots; improving road accident data collection and database management; training of highway engineers and professionals in road safety engineering; improving vehicular safety standards; encouraging safer road infrastructure including application of intelligent transport; effective trauma care; enforcement of safety laws etc. The important schemes on road safety operated by the Ministry include publicity measures and awareness campaign on road safety; Scheme for Setting up Institutes for Driving Training; Refresher Training of Drivers in Unorganised Sector and Human Resource Development; National Highways Accident Relief Service Scheme (NHARSS); setting up of inspection and certification centres and road safety; and pollution testing equipment and programme implementation.

To enhance passenger safety and specially the safety and security of women and children in transit, all the passenger buses and taxis are mandated to be fitted with GPS devices and panic buttons to enable real time tracking and interventions in times of crisis.

e-Tolling

In order to remove traffic bottleneck at toll plazas and ensure seamless movement of vehicles and hassle-free collection of toll, the government has implemented a nation-wide Electronic Toll Collection based on passive Radio Frequency Identification (RFID) conforming to EPC Gen-2, ISO 18000-6C standards. It provides for electronic collection of toll through FASTags. The project was first launched in 2015.

National Green Highways Project

In order to develop eco-friendly highways, the Green Highways (Plantation Transplantation, Beautification and Maintenance) Policy was firmed up in 2016. The Policy aims to develop eco-friendly national

highways with the participation of community, farmers, NGOs and private sector. The initial plantation drive on 1,500 km of national highways at a cost of about ₹ 300 crore was launched as part of the Policy.

Shipping

The Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent ministries. Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Shipping encompasses within its fold shipping and port sectors which also include shipbuilding and ship repair, major ports and inland water transport. It is the apex body for formulation and administration of the rules and regulations and laws relating to shipping. Maritime transport is a critical infrastructure for the social and economic development of a country. It represents the pace, structure and pattern of development of water transport. It has been entrusted with the responsibility to formulate policies and programmes on these subjects and their implementation.

Website: www.shipmin.gov.in

Maritime Development

India has a long coastline of about 7,517 km, spread on the western and eastern shelves of the mainland and also along the Islands. It is an important natural resource for the country's trade. There are 12 major ports and about 200 non-major ports. Indian shipping industry has over the years played a crucial role in the transport sector of the economy. Approximately 95 per cent of the country's trade by volume and 68 per cent by value is moved through maritime transport. Therefore, shipping and ocean resources, ship design and construction, ports and harbours, issues relating to human resource development, finance, ancillaries and new technologies need to be developed in the light of the emerging scenario. Shipping continues to remain unchallenged as the world's most efficient means of transportation and there is a need to recognise, reward and promote quality within the industry.

Sagarmala Programme

To harness the coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes, the government of India has embarked on the ambitious Sagarmala Programme to promote port-led development in the country. The vision of the Programme is to reduce logistics cost of EXIM and domestic trade with minimal infrastructure investment. This includes: reducing the cost of transporting domestic cargo; lowering logistical cost of bulk commodities by locating future industrial capacities near the coast; improving export competitiveness by developing port proximate discrete manufacturing clusters, etc. The objectives of the Programme include: port modernisation, new port development, port connectivity, coastal community development, etc.

Shipping Industry

Shipping industry is one of the most globalised industries operating in a highly competitive business environment that is far more liberalised than most of the other industries and is, thus, intricately linked to the world economy and trade. Shipping plays an important role in the transport sector of India's economy especially in Exim trade.

The salient features of India's shipping policy are the promotion of national shipping to increase self-reliance in the carriage of country's overseas trade and protection of stakeholder's interest in Exim trade.

Ship Building

The Indian shipbuilding industry continued to concentrate on defence, coastal and inland vessels. The fleet expansion plans of Indian Navy and the vessels forthe Indian Coast Guard are the two prime segments which were targeted by the Indian shipyards. A shipbuilding subsidy scheme was in existence to promote Indian Shipbuilding industry for Central PSU Shipyards since 1971. The scheme was extended to all Indian shipyards in October 2002. This policy which provided shipbuilding subsidy gave a boost to this Industry.

Ship Repair

The Indian share in the global ship repair market continued to be low as there was very little capacity addition. Indian ship owners continued to rely on overseas repair facilities owing to insufficient capacity and high

level of taxation. There are 27 shipyards in the country, 6 under central public sector, 2 under state governments and 19 under private sector.

Ship Recycling

India has 25-30 per cent share in the global ship recycling industry. Ship recycling is carried out mainly at Alang-Sosiya in Gujarat. Started in February 1983, Alang-Sosiya is the largest ship recycling yard in the world. Approximately 10 km long sea front on the western coast of the Gulf of Cambay adjoining to Alang-Sosiya village has been developed as a ship recycling yard. It is blessed with high tidal range, long beach with gentle slope and firm ground, facilitating beaching of ships just at the threshold of the plot. It has high recycling potential of more than 450 ships (approximately 4.5 million LDT) per annum. Ship recycling serves the nation by producing about more than 3.5 million ton per annum of re-rollable steel without exploiting the natural resources and provides a green route to generate the secondary steel in place of generation of steel from the ore itself.

Major Ports

Emerging global economy has opened up new avenues in all the sectors in general and maritime sector in particular. Ports provide an interface between ocean transport and land-based transport and play a vital role in the overall economic development. There are 12 major ports and about 200 non-major ports along India's coastline which is about 7,517 km. The 6 major ports-Kolkata, Paradip, Visakhapatnam, Kamarajar (Ennore), Chennai and V.O. Chidambaranar, are on the east coast and the other major ports, viz., Cochin, New Mangalore, Mormugao, Mumbai, Jawaharlal Nehru Port (Sheva, Navi Mumbai) and Deendayal (erstwhile Kandla) are on the west coast. The major ports are under the direct administrative control of the central government and fall in Union List 7th Schedule of Constitution. Ports other than the major ones are under the jurisdiction of the respective maritime state government and fall in the Concurrent List. Of the total traffic handled by all Indian ports, 57 per cent is handled by major ports and 43 by others.

Kolkata Port: Kolkata Port is the only riverine major port in the country having been in existence for more than 100 years. It has a vast hinterland

comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, UP, MP, Assam, North East hill states and the two landlocked neighbouring countries namely, Nepal and Bhutan. The port has twin dock systems: Kolkata Dock System on the eastern bank and Haldia Dock Complex on the western bank of river Hooghly.

Paradip Port: Paradip Port is one of the major ports of the country. Government of India took over the management of the port from the state government in 1965. The Government of India declared Paradip Port Trust (PPT) as the eighth major port of the country making it the first major port in the east coast commissioned in independent India.

New Mangalore Port: New Mangalore (now Mangaluru) Port was declared the ninth major port in 1974, and was inaugurated in 1975. The port has 16 berths and one single point mooring with a total capacity of 87.63 MTPA.

Cochin Port: The modern port of Cochin was developed during the period 1920-1940 due to the untiring efforts of Sir Robert Bristow. By 1930-31, it was formally opened for vessels up to 30 feet draught. Cochin was given the status of a major port in 1936. The administration of the port got vested in a Board of Trustees in 1964 under the Major Port Trusts Act, 1963. Cochin Port is strategically located on the south-west coast of India and at a commanding position at the crossroads of the east-west ocean trade. It is a natural gateway to the vast industrial and agricultural produce markets of the South-West India. The hinterland of the port includes all of Kerala and parts of Tamil Nadu and Karnataka. Cochin with its proximity to the international sea route between Europe and the Far East and Australia can attract a large number of container lines offering immense business opportunities.

jawaharlal Nehru Port: Constructed in the mid-1980s and commissioned in 1989, Jawaharlal Nehru Port has come a long way by becoming a world-class international container handling port. It is a trendsetter in port development in India through new initiatives like private sector participation. Jawaharlal Nehru Port is an all-weather tidal port having 12 berths with a capacity of 89.37 MTPA.

Mumbai Port: Mumbai Port is a fully integrated multi-purpose port handling container, dry bulk, liquid bulk and break bulk cargo. It has extensive wet and dry dock facilities to meet the normal needs of ships

using the port. The port has 33 berths with a total capacity of 65.33 MTPA.

Chennai Port: Chennai Port is an all-weather artificial harbour with one outer harbour and one inner harbour with a wet dock and a boat basin with round the clock navigation facilities. It was established in 1875. It has 24 berths with a total capacity of 93.44 MTPA.

Mormugao Port: Mormugao Port, situated on the west coast of India, is more than a century old port. It has modern infrastructure capable of handling a wide variety of cargo. It is a natural harbour protected by a breakwater and also by a mole. The Port has excellent infrastructure and a conducive work culture. A deep draft channel with 14.4 mtrs depth permits large vessels to enter the harbour. The port has 7 berths plus trans-shipment with a total capacity of 50.04 MTPA.

V.O. Chidambaranar Port (Tuticorin): V.O. Chidambaranar Port is located strategically close to the east-west international sea routes on the south eastern coast of India at latitude 8°45'N and longitude 78°13'E. located in the Gulf of Mannar, with Sri Lanka on the south-east and the large landmass of India on the west. The port has 15 berths with a total capacity of 65.90 MTPA.

Deendayal Port (Kandla): Deendayal Port (erstwhile Kandla Port) was established in 1950 as a central government project and Union Government took over Kandla for its development as a major port. It has 28 berths including 3 single buoy moorings, including an off-shore terminal at Vadinar with a capacity of 150.26 MTPA.

Visakhapatnam Port: Port of Visakhapatnam, a natural harbour, was opened to commercial shipping in 1933. It is the only Indian port possessing three international accreditations: ISO 14001; 2004 (EMS)/OHSAS 18001 and ISO 90001:2000 (QMS). It has mechanized handling facilities for iron ore, iron pellets, alumina, fertiliser raw material, crude oil and POL products, liquid ammonia, phosphoric acid, edible oil, caustic soda and other liquid cargoes. The port has 24 berths with a total capacity of 110.75 MTPA.

Kamarajar Port Limited (Ennore): Kamarajar Port Limited (KPL), the 12th major port under the Ministry of Shipping was commissioned in 2001, primarily as a coal port dedicated to handling thermal coal requirements of Tamil Nadu Electricity Board (TNEB). KPL has the

distinction of being the only corporate port amongst the major ports administered by the central government. The port has 8 berths with a total capacity of 57.00 MTPA.

Inland Water Transport

India has one of the longest navigable and inland water networks. However, cargo transport through these inland waterways is, presently less than 1 per cent of the total cargo movement in the country. Inland Waterways Authority of India (IWAI) was constituted in 1986, for the development and regulation of inland waterways for shipping and navigation. About 111 inland waterways have been declared as 'National Waterways' under the National Waterways Act, 2016. After declaration of 106 new national waterways, pre-feasibility studies and techno economic studies/Detailed Project Report (DPR) are being carried out which interalia cover the potential of navigability, cargo availability, cost of development, etc.

Jai Marg Vikas Project

Jai Marg Vikas Project (JMVP) is being implemented by the IWAI for the capacity augmentation of National Waterway I on the Haldia-Varanasi stretch of Ganga-Bhagirathi-Hooghly river system with the technical and financial assistance of the World Bank. The salient features of JMVP include: construction of three multimodal and inter-modal terminals, new navigational lock at Farakka, integrated vessel repair and maintenance facilities, day and night navigational aids, river conservancy work, etc.

Coastal Shipping

Coastal Shipping is fuel-efficient, environment-friendly and helps in easing traffic congestion on roads. In other large economies like China, USA and Japan the share of waterways is more than that of India. Presently, the share of waterways in transportation of domestic goods is less than its potential.

Cruise Shipping

'Cruise Tourism' is a fast-growing component of the leisure industry, worldwide. Through this segment of niche tourism, huge amount of

foreign exchange can be earned and income generated onshore by providing the right policy environment and infrastructure. With the steady development of India's economy, growing middle class and increasing disposable income, the overall environment is conducive for the promotion of cruise tourism within the country.

Indian Maritime University

Indian Maritime University (IMU) was set up in 2008 in Chennai as a central university with campuses at Chennai, Kolkata and Visakhapatnam. The existing seven government and government-aided maritime training and research institutes, viz., Marine Engineering and Research Institute, Kolkata; Marine Engineering and Research Institute, Mumbai; Lal Bahadur Shastri College of Advanced Maritime Studies and Research, Mumbai; T.S. Chanakya, Navi Mumbai; National Maritime Academy, Chennai; Indian Institute of Port Management, Kolkata; as well as National Ship Design and Research Centre, Visakhapatnam have been merged with IMU.

Lighthouses and Lightships

In the vast ocean, a mariner is not sure of his position unless he is guided by some signal from the land/space. Directorate General of Lighthouses and Lightships (DGLL) provides service to enable the mariners to know their position with respect to a fixed point on the land with the help of visual aids to navigation such as lighthouses, light vessels, buoys, beacons and radio aids to navigation like differential global positioning system (DGPS); radar beacons (Racons); vessel traffic service (VTS); and automatic identification system (AIS).

Directorate General of Shipping, Mumbai

The Directorate General of Shipping, an attached office of the Ministry of Shipping, was established in 1949 for administering the Indian Merchant Shipping Act, 1958 on all matters relating to shipping policy and legislation; implementation of various international conventions relating to safety; prevention of pollution and other mandatory regulations of the international maritime organisations; promotion of maritime education and training; examination and

certification; supervision of other subordinate offices for their effective functioning etc.

Website: www.dgshipping.gov.in

Shipping Corporation of India Limited

The Shipping Corporation of India (SCI) was formed in 1961 by amalgamation of Eastern Shipping Corporation and Western Shipping Corporation through Shipping Corporation Amalgamation Order 1961. The amalgamation envisaged better coordination of policies, greater economy and efficiencies of operations between the two companies. Sailing through for five decades, SCI continues to be the country's premier shipping line, owning a fleet of 70 vessels.

Website: www.shipindia.com

Cochin Shipyard Limited

Cochin Shipyard Limited (CSL), located in Kochi in Kerala, is one of the largest shipyards in the country which can build ships up to 1,10,000 DWT and repair ships up to 1,25,000 DWT. The yard has built and delivered over 100 ships including tankers, bulk carriers, port crafts, offshore vessels, tugs and passenger vessels. The company has exported around 45 ships over the last decade and is currently building one of the most prestigious warships of the Indian Navy Indigenous Aircraft Carrier. Apart from the aircraft carrier, the Yard has delivered 20 fast patrol vessels to the Indian Coast Guard. CSL also has a strong presence in ship repair. In the ship repair segment, it has repaired and maintained various types of ships such as merchant vessels, naval crafts, coast guard vessels, dredgers, jack up rigs, etc. It is the only yard which has regularly undertaken dry dock repairs of the aircraft carriers of Indian Navy. CSL had the privilege of receiving INS Viraat for the 13th time—her last refit in 2016-17 and ISO9001 certificate.

Website: www.cochinshipyard.com

Dredging Corporation of India

Dredging Corporation of India Ltd. (DCIL) was formed in 1976 to provide integrated dredging and related marine services for promoting the country's national and international maritime trade, beach nourishment, reclamation, inland dredging, environmental protection and ultimately to become a global player, in the field of dredging. Located

strategically on the eastern seaboard of India at Visakhapatnam, DCI helps ensure continuous availability of the desired depths in the shipping channels of the major and minor ports, navy, fishing harbours and other maritime organisations. It also serves the nation in a variety of ways, be it capital dredging for creation of new harbours, deepening of existing harbours or maintenance dredging for the upkeep of the required depths at various ports.

Website: www.dredge-india.nic.in

Andaman and Lakshadweep Harbour Works

Andaman and Lakshadweep Harbour Works (ALHW), a subordinate office under Ministry of Shipping was established during 1965 for the service of A&N Islands and Lakshadweep Islands. The ALHW is entrusted with the responsibilities of formulating and implementing the programme of Ministry of Shipping for providing port and harbour facilities in the islands.

Website: www.andsswl .and.nic.in/alhw

Hooghly Dock and Port Engineers Ltd

Hooghly Dock and Port Engineers Limited (HDPEL), Kolkata became a Central Public Sector Undertaking in 1984. The Company has two working units in Howrah district of West Bengal, one at Saikia and another at Nazirgunge. The installed capacity in shipbuilding is 1,100 tonnes per annum and in ship repairs 125 ships per annum. Apart from a dry dock and a jetty, it has six slipways. The yard is capable of constructing various types of ships (including passenger ships) and other vessels such as dredgers, tugs, floating dry docks, fishing trawlers, supply-cum-support vessels, multipurpose harbour, vessels, light house tender vessels, barges, mooring launches, etc., and undertaking repairs of different types of vessels.

Civil Aviation

The Ministry of Civil Aviation is responsible for formulation of national policies and programmes for the development and regulation of the civil aviation sector in the country. It is responsible for the administration of the Aircraft Act, 1934, Aircraft Rules, 1937, and various other legislations pertaining to the aviation sector in the country.

In addition to primary functions of framing of policies, the Ministry provides guidance to the organisation in the implementation of policy guidelines, monitors and evaluates their activities and also provides their interface with the Parliament. It also supervises implementation by the organisations of special programmes of the government, particularly those intended for weaker sections of society.

Website : www.civilaviation.gov.in

National Civil Aviation Policy

For the first time since Independence an Integrated Civil Aviation Policy was notified in June 2016, which aims at creating an ecosystem that will push the growth of the civil aviation sector, which in turn, would promote tourism, increase employment and lead to a balanced regional growth. The Policy aims to take flying to the masses by making it affordable and convenient, enhance ease of doing business through deregulation, simplified procedures and e-governance and promote the entire aviation sector chain in a harmonised manner covering cargo, MRO, general aviation, aerospace manufacturing and skill development.

Regional Connectivity Scheme

The Regional Connectivity Scheme (RCS)-UDAN was envisaged in National Civil Aviation Policy (NCAP) 2016 with the twin objectives of promoting balanced regional growth and making flying affordable for masses. The Scheme, which will be in operation for a period of 10 years, envisages providing connectivity to un-served and underserved airports of the country through revival of existing air strips and airports.

Air Sewa

Air Sewa is an initiative of the Ministry of Civil Aviation launched in 2016 to offer a convenient and hassle-free air travel experience to people. It works through an interactive web portal (airsewa.gov.in) or a mobile app for both android and iOS platforms that includes a mechanism for grievance redressal, back-office operations for grievance handling flight status/schedule information, airport information and FAQs. Air Sewa initiative has integrated various stakeholders in the aviation sector with whom an air traveller has to interact during the air travel.

FDI Liberalisation

Government of India has raised the FDI limit for 49 to 100 per cent in scheduled and non-scheduled air transport services, FDI in scheduled airlines up to 49 per cent is permitted under automatic route and FDI beyond 49 per cent through government approval. For NRIs, 100 per cent FDI will continue to be allowed under automatic route.

Directorate General of Civil Aviation

The Directorate General of Civil Aviation (DGCA) is an attached office of the Ministry of Civil Aviation and is headed by Director General (Civil Aviation). The headquarters are located in New Delhi and there are regional and sub-regional offices all over the country. DGCA is primarily responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety and airworthiness standards. It is also responsible for licensing of pilots, aircraft maintenance engineers and monitoring of flight crew standards; regulation of civil aircraft; investigation of minor air incidents; supervision of training activities of flying/gliding clubs and other such regulatory functions. The regulations are in the forms of the Aircraft Act, 1934, the Aircraft Rules, the Civil Aviation Requirements (CAR), and the aeronautical information circulars. It also coordinates all regulatory functions with International Civil Aviation Organisation (ICAO).

Website : www.dgca.gov.in

Bureau of Civil Aviation Security

The Bureau of Civil Aviation Security (BCAS) was initially set up as a cell in the DGCA in 1978, to coordinate, monitor, inspect and train personnel in Civil Aviation Security matters. It was reorganised into an independent department in 1987. BCAS is the regulator for civil aviation security in the country and is responsible for laying down the standards for pre-embarkation security and anti-sabotage measures in respect of civil flights and ensuring their compliance through regular inspections and security audits. Its main responsibility is to lay down standards and measures in respect of security of civil flights at international and domestic airports in India and Indian aircraft operators at foreign airports. The aim of BCAS is to safeguard civil aviation operations against acts of unlawful interference and it is the regulatory authority for discharging all relevant national and international obligations in respect of aviation security responsibilities which include, interalia, planning and

coordination of all aviation security related activities, operational emergencies and crisis management. The BCAS has its headquarters in New Delhi and has nine regional offices at New Delhi, Mumbai, Kolkata, Chennai, Ahmedabad, Amritsar, Guwahati, Hyderabad and Imphal airport.

Website: www.bcasindia.gov.in

Airports Authority of India

Airports Authority of India (AAI) came into being in April 1995. AAI is a Mini Ratna Category-I PSE involved in building, upgrading, maintaining and managing airports infrastructure across the country. It owns and maintains 125 airports (96-operational and 29 - non-operational) comprising 21- international airports (3 - civil enclaves), 8 - custom airports (4 - civil enclaves), 77 - domestic airports and 19-domestic civil enclaves.

Website : www.aai.aero

Air Navigation Services

Airports Authority of India (AAI) provides Air Navigation Services (ANS) at all civil airports in the country. AAI manages the designated Indian air space measuring 2.8 million square nautical miles which includes land area measuring 1.05 million square nautical miles and oceanic airspace measuring 1.75 million square nautical miles. Air Navigation Services are also provided by the AAI at 11 other airports that are not managed by AAI namely Delhi, Mumbai, Bengaluru, Hyderabad, Cochin, Lengpui, Diu, Latur, Mundra, Nanded and Sathya Sai Puttaparthy airports, which are joint venture airports, state government owned airports and private airports.

GPS Aided Geo Augmented Navigation (GAGAN) is an augmentation system to enhance the accuracy and integrity of GPS signals to meet precision approach requirements in Civil Aviation and it is being implemented jointly by AAI and ISRO. It is fully operational since May 2015 and available on 24x7 basis. Presently GAGAN Signal-in-Space is available to users from three geostationary satellites (GSAT-8, GSAT-10 and GSAT-15).

Air India

Consequent upon merger of erstwhile Air India Ltd. and Indian Airlines, a new company, viz., National Aviation Company of India Limited (NACIL) was incorporated. Consequently, post merger, the new entity is known as “Air India” and the appointed date of the merger is April 1, 2007. The “Maharaja” is retained as its mascot. The Registered Office of the Company is in New Delhi. Air India Ltd. is basically a passenger-oriented airlines operating to 72 online domestic stations (including Alliance Air) and 42 international destinations in 28 countries. It is in transport services sector under the administrative control of the Ministry of Civil Aviation.

Website: www.airindia.in

Air India Air Transport Service Limited (AIATSL)

AIATSL provides ground handling services at 65 airports. Apart from handling the flights of Air India Limited and its airlines subsidiary companies, ground handling is also provided for 24 foreign scheduled airlines; 4 domestic scheduled airlines; 3 regional airlines; 16 seasional charter airlines; and 23 foreign airlines availing perishabale cargo handling.

Air India Charters Limited (AICL)

AICL operates a low-cost airline under the brand name, “Air India Express". Launched in 2005 with a fleet of 3 leased B737-800 aircraft, it operated from 3 stations in Kerala to 5 stations in the Gulf. As on March 31, 2016, AICL had a fleet of 17 B737-800 owned and one B737-800 leased aircraft. It operated to 12 Indian and 13 foreign on-line stations.

Air India Engineering Services Limited (AIESL)

AIESL presently provides Maintenance, Repair and Overhaul (MRO) services to a fleet of 135 aircraft of Air India Limited and its subsidiary companies, viz., Air India Charters Ltd. and Airline Allied Services Limited and few third party airlines. MRO services are proposed to be provided to all the airlines and aircrafts within the flying distance of 5 hours from the facility.

Airline Allied Services Limited (AASL)

Till 2016, the Company had 3 ATR-42-320s, 5 ATR-72-600 and 3 CRJ-700s leased aircraft in its fleet. At the end of the year, the network

of the Company consisted of more than 29 stations within the country. It operates around 196 flights per week.

Alliance Air operates air services in the north-east region under an MoU with the North Eastern Council (NEC). It also operates flights between Agatti and the mainland under an undertaking of grant of Viability Gap Funding (VGF) by the Lakshadweep Administration. Further, it has charter operations on Port Blair/ Car Nicobar/Port Blair with CRJ aircraft once a week on behalf of the Andaman and Nicobar Administration from July 2014.

Vande Bharat Mission

Vande Bharat Mission consists of special repatriation flights operated by Indian carriers and chartered flights operated by both Indian and foreign carriers. As per the information provided by the Ministry of External Affairs till August 2020, more than 11 lakh Indians (excluding land border crossings) have returned to India under this mission.

Lifeline UDAN

Ministry of Civil Aviation launched 'Lifeline UDAN' in March 2020. It is an initiative to ensure a steady supply of essentials as well as medical supplies, Personal Protective Equipment (PPEs), test kits, etc., to all parts of the country. For this purpose, the Ministry facilitated establishing Lifeline UDAN mechanism to match the requirements/ consignments of states/ UTs/ MoHFW (HLL & ICMR)/ other ministries with special flight plans. Initially, the consignor state governments/UTs/agencies were to incur the transportation cost for Lifeline UDAN flights.

Hotel Corporation of India Limited (HCI)

Subsequent to the sale of 3 units of HCI (Centaur Mumbai Airport, Centaur Juhu Beach, Mumbai and Indo Hokke Hotel Ltd., Rajgir) as a part of disinvestment process as approved by the Government of India, at present, there are three units of HCI, viz., Centaur Lake View Hotel (CLVH), Srinagar, Centaur Delhi Airport (CHDA) including Chefair Flight Catering (CFCD), Delhi and Chefair Flight Catering (CFCM), Mumbai.

Website: www.centaurhotels.com

Pawan Hans Limited

Pawan Hans Limited (PHL) was incorporated in October 1985 (under the name of 'Helicopter Corporation of India Limited') as a government company under the Companies Act. It was established with the primary objective of providing helicopter support services to the oil sector in offshore exploration, operating in hilly and inaccessible areas and making charter flights available for promotion of travel and tourism. The registered office of Pawan Hans is located in New Delhi, corporate office at Noida and its regional offices are at Mumbai, New Delhi and Guwahati. The Company is providing helicopter services to several state governments namely, Meghalaya, Mizoram, Maharashtra, Tripura, Sikkim, Odisha, Himachal Pradesh and Ministry of Home Affairs. It has provided 4 Dauphin helicopters to Andaman & Nicobar Islands and 2 Dauphin helicopters to Lakshadweep Islands. The Company is also providing helicopter services to NTPC, GAIL, GSPC and Oil India.

Pawan Hans has emerged as one of Asia's largest helicopter operators having a well-balanced own operational fleet of 43 helicopters at present with pan-India presence. Pawan Hans has been able to secure long-term contracts with institutional clients mainly in the oil industry and government sector mainly under competitive tender conditions.

It has been providing helicopter support for offshore operation of ONGC for carrying its men and vital supplies round the clock to drilling rigs situated in Bombay off-shore platforms. Pawan Hans operates to ONGC's Rigs (mother platforms and drilling rigs) and production platforms (wells) within a radius of 130 nm. from the mainland at Mumbai.

Pawan Hans also runs the helicopter services from Phata to the Holy Shrine of Kedarnath during the yatra seasons, i.e., May-June and September-October every year. It has also provided helicopter services for the Shri Amarnath Shrine.

Website: www.pawanhans.co.in

Indira Gandhi Rashtriya Uran Akademi

The Indira Gandhi Rashtriya Uran Akademi (IGRUA) was set up at Fursatganj, Raebareli (Uttar Pradesh), to bring about a quantum improvement in the standards of flying and ground training of commercial pilots in the country. The Akademi is equipped with most modern and sophisticated trainer aircraft along with their associated

simulator with 180° view, up-to-date audio-visual training aids and other facilities for effective ground training. It employs qualified flying and ground instructors, with long experience in the field of aviation and flying training. The aim at IGRUA is not only to train to make a pilot but also to make one an effective systems manager in aeronautics. The flying trainees of the Akademi acquire the standard required for their transit with ease into the cockpits of the airlines. It is an autonomous body under the control of the Ministry of Civil Aviation. The Akademi has made remarkable expansion of its existing infrastructure, viz., doubling the capacity of hostel from 72 fully furnished rooms to 144, including a 20-room girls' hostel. Re-carpeting of roads; installation of solar water heating system in hostels; installation of air-conditioning plant having capacity of 60 TR X 3; laying of new water supply lines; renovations of sports complex, a newly constructed swimming pool; recreation centre etc., are the other major infrastructure upgradations carried out in the institutional area.

Website : www.igrua.gov.in

Airports Economic Regulatory Authority of India

The Airports Economic Regulatory Authority (AERA) is a statutory body constituted under the Airports Economic Regulatory Authority of India Act, 2008 in 2009 with its head office at Delhi.

Rajiv Gandhi National Aviation University

Rajiv Gandhi National Aviation University (RGNAU) is a central university under the administrative control of the Ministry. The university has been established by the Rajiv Gandhi National Aviation University Act, 2013. It is situated at Fursatganj, Raebareli, district Amethi, Uttar Pradesh. The University has been envisaged as the premier institution for higher learning within the aviation milieu aimed at providing cutting edge and critical training and research to enhance the aviation industry within India. It awards diploma, degree and postgraduate degrees in the field of civil aviation.

The objective of the University is to facilitate and promote aviation studies, teaching, training and research in conjunction with the industry to achieve excellence in operations and management of all the sub-sectors within the aviation industry.

Website: www.rgnau.ac.in

27 Water Resources

THE Ministry of Water Resources, River Development and Ganga Rejuvenation lays down policies and programmes for development and regulation of the water resources of the country. It covers: sectoral planning; coordination; policy guidelines; technical examination and techno-economic appraisal of projects; providing central assistance to specific projects; facilitation of external assistance and assistance in the resolution of inter-state water disputes; policy formulation; planning and guidance in respect of major, medium and minor irrigation; groundwater management; command area development; flood management; dam safety and river development and Ganga rejuvenation (including its tributaries rejuvenation); regulation and development of inter-state rivers; implementation of awards of Tribunals; water quality assessment; bilateral/ external assistance; and matters relating to rivers common to India and neighbouring countries.

The Ministry has been renamed Ministry of Jal Shakti (Jal Shakti Mantralaya) with two departments, i.e., Department of Water Resources, River Development and Ganga Rejuvenation and Department of Drinking Water and Sanitation.

Website: www.mowr.gov.in

Water Availability

The average annual water availability of any region or country is largely dependent upon hydrometeorological and geological factors. India receives mean annual precipitation of about 3,880 Billion Cubic Meter (BCM). The average annual water availability, after evaporation, is assessed at 1,999.20 BCM. Due to geological and other factors, the utilisable water available is limited to 1,122 BCM per annum, comprising of 690 BCM of surface water and 432 BCM of groundwater. Out of this, the water potential utilised is around 699 BCM, comprising 450 BCM of surface water and 249 BCM of groundwater. Total requirement of the country for different uses for high demand scenario

for the years 2025 and 2050 has been assessed as 843 BCM and 1,180 BCM respectively.

Water availability per person declines progressively with the increase in population. For India, the average annual per capita water availability of water for the years 2001 and 2011 was assessed at 1,816 cubic meters and 1,545 cubic meters respectively. The average annual per capita water availability is projected to further reduce to 1,340 cubic meters and 1,140 cubic meters in the years 2025 and 2050 respectively. As per the commonly used Falkenmark Indicator, annual percapita water availability of less than 1,700 cubic meters is considered as water stressed condition, whereas annual percapita water availability below 1,000 cubic meters is considered as a water scarcity condition.

National Water Policy

The National Water Policy, 2012, was adopted by the National Water Resources Council. This Policy has made several recommendations for conservation, development and improved management of water resources in the country. The policy emphasises the need for a national water framework law; comprehensive legislation for optimum development of inter-state rivers and river valleys; evolving a system of benchmarks for water uses for different purposes to ensure efficient use of water; setting up of water regulatory authority by each state; and incentivising recycle and reuse of water. It also lays emphasis on community participation in management of water resources projects and services; incentivising water saving in irrigation through methods like micro-irrigation, automated irrigation operation, etc; undertaking conservation of rivers, river corridors, water bodies and infrastructure in a scientifically planned manner through community participation; and arresting declining groundwater levels in over-exploited areas.

National Water Mission

National Water Mission (NWM) was set up as per the National Action Plan on Climate Change (NAPCC). The main objective of the National Water Mission is (NWM) “conservation of water, minimising wastage and ensuring its more equitable distribution both across and within states through integrated water resources development and management". The

five identified goals of the Mission are: (a) comprehensive water database in public domain and assessment of impact of climate change on water resourcea; (b) promotion of citizen and state action for water conservation, augmentation and preservation; (c) focused attention to vulnerable areas including over-exploited areas; (d) increasing water use efficiency by 20 per cent; and (e) promotion of basin level integrated water resources management. Various strategies for achieving the goals have been identified which lead to integrated planning for sustainable development and efficient management with active participation of the stakeholders.

NWM Web Portal

An independent Web Portal of NWM has been launched, which aims at providing all the information relating to water resources, organisations and their activities on different aspects of water resources at one point. Assessment of Impact of Climate Change on water resources: NWM has identified eight river basins (Mahanadi, Mahi, Luni, Tapi, Sutlej, Sabarmati, Subarnarekha and west-flowing rivers from Tadri to Kanyakumari) for study of impact of climate change in association with research institutes like IITs, NITs, IISc and NIH under the R&D scheme of the Ministry.

2nd National Water Awards 2019

The Department of Water Resources, River Development and Ganga Rejuvenation has instituted National Water Awards for various categories including Best State, Best District, Best Village Panchayat, Best Municipal Corporation/Other Municipal Bodies, Best Schools, Best TV Show, Best Newspaper, etc., in the field of water conservation.

National Mission for Clean Ganga

The Ganga basin is the most populous in the world, with more than 400 million people in the country alone. It accounts for 28 per cent of India's water resources, holds about 26 per cent of landmass and hosts 43 per cent of the population. The main stem of the river traverses five major states namely, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal and travels 2,525 kms. The Ganga River basin including all its tributaries cover about a million square kilometres area in eleven states in the country. The Ganga basin exemplifies a typical “hydraulic

civilisation", where achieving water security to harness the river's productive potential and limit its destructive potential is critical for sustenance and economic growth. Besides this, the river is also home to some of exotic marine life such as gharials, turtles, Gangetic dolphins and golden mahaseer, etc. In addition to its physical resource value, the Ganga is culturally very significant for India. On important religious/spiritual days, millions of people converge on its banks in select cities to pray and bathe in the waters, and for them a clean Ganga holds great value.

Despite being highly revered and the primary water resource for the heartland of the country, the Ganga river is today seriously polluted and under extreme environmental stress. Rapidly increasing population, rising standards of living and exponential growth of industrialisation and urbanisation have exposed the mighty Ganga to various forms of degradation. The river suffers from high levels of organic and bacterial pollution, especially in its critical middle stretch, resulting in a wide range of negative impacts, including human health, agriculture, urban services, and the environment. The major source of pollution in the river is untreated domestic and industrial liquid waste thrown into it. About 70 per cent of the pollution is from untreated domestic sewage; 20 per cent is from toxic industrial waste water; and 10 per cent is from non-point sources such as agricultural runoff, open defecation, dumping of solid waste disposal, etc. The threat of global climate change, the effect of glacial melt on Ganga flow and the impacts of infrastructural projects in the upper reaches of the river, raise issues that need a comprehensive response.

There have been previous attempts to clean the river, with mixed results. The Ganga Action Plan (GAP) was launched in 1985 and extended to two phases (GAP I & GAP II) over more than two decades. It focused primarily on urban wastewater and funded a large number of Wastewater Treatment Plants (WWTPs) and related urban waste water infrastructure. Impact data show that, overall, the programme was able to maintain or even improve water quality in spite of significant increases in pollution loadings due to urban and industrial growth. However, there were a number of limitations in its implementation, including (i) insufficient investments; (ii) underutilisation of created capacity; (iii)

little ownership of local bodies; (iv) long delays, and poor communications; resulting in a public relations failure.

In 2015, the "Namami Gange" Integrated Ganga Conservation Mission programme was launched. This was at an indicative cost of ₹ 20,000 crores, as an umbrella programme with an aim to integrate previous and currently ongoing projects and new initiatives planned as its part. In 2016, through the River Ganga (Rejuvenation, Protection and Management) Authorities Order 2016, National Ganga River Basin Authority (NGRBA) has been replaced with National Ganga Council for Rejuvenation, Protection and Management of River Ganga. National Mission for Clean Ganga (NMCG) has also been converted to an authority.

Pradhan Mantri Krishi Sinchayee Yojana

During 2015-16, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched with an aim to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on-farm water use efficiency, introduce sustainable water conservation practices, etc.

The main objectives of the scheme include: achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub-district level water use plans); enhance the physical access of water on the farm and expand cultivable area under assured irrigation *(har khet ko pani);* improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent; enhance recharge of aquifers and introduce sustainable water conservation practices; promote extension activities relating to water harvesting, water management and crop alignment for farmers and grassroot level field functionaries; and attract greater private investments in precision irrigation.

Major and medium irrigation/ multipurpose irrigation (MMI) projects are being funded under PMKSY-AIBP and Repair, Renovation and Restoration (RRR) of Water Bodies, Surface Minor Irrigation (SMI) projects and Command Area Development & Water Management (CAD&WM) projects are being funded under PMKSY-Har Khet Ko Pani (HKKP).

Accelerated Irrigation Benefit Programme

The Accelerated Irrigation Benefits Programme (AIBP) was launched in 199697 to provide Central Assistance to major/medium irrigation projects in the country, with the objective to accelerate implementation of such projects, which were beyond resource capability of the states or were in advanced stage of completion. Priority was given to those projects which were started in pre-Fifth and Fifth Plan periods and also to those which were benefitting tribal and drought-prone areas. From 1999-2000 onwards, Central Loan Assistance under AIBP was also extended to minor surface irrigation projects of special category states/UTs (North Eastern states and hilly states of Himachal Pradesh, Sikkim, former state of Jammu and Kashmir, Uttarakhand and projects benefitting Kalahandi, Balangir and Koraput districts of Odisha).

Command Area Development and Water Management

The Centrally Sponsored Command Area Development (CAD) Programme was launched in 1974-75 for development of adequate delivery system of irrigation water up to farmers' field with an objective to enhance water use efficiency and production and productivity of crops per unit of land and water for improving socio-economic condition of farmers. The pogramme envisages integration of all activities relating to irrigated agriculture in a coordinated manner with multi-disciplinary team under a Command Area Development Authority.

The Programme was restructured and renamed as Command Area Development and Water Management (CAD&WM) Programme in 2004. The Programme is being implemented pari-passu with Accelerated Irrigation Benefits Programme (AIBP) during the XII Five Year Plan. The programme is under implementation as a sub-component of Har Khet Ko Pani (HKKP) component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) from 2015-16 onwards. The ongoing CAD&WM programme has been restricted to the implementation of CAD works of 99 prioritised AIBP projects from 2016-17 onwards. The activities covered under CAD component are broadly categorised as 'Structural' and 'Non-Structural' interventions as detailed here:

(a) structural intervention: includes survey, planning, design and execution of: (i) on-farm Development (OFD) works; (ii) construction of fields, intermediate and link drains; (iii) correction of system deficiencies; and (iv) reclamation of waterlogged areas.

(b) non-structural intervention: includes activities directed at strengthening of Participatory Irrigation Management (PIM): (i) one-time functional grant to the registered water users' associations (WUAs); (ii) one-time Infrastructure Grant to the registered WUAs; and (iii) trainings, demonstration, and adaptive trials with respect to water use efficiency, increased productivity, and sustainable irrigation participatory environment.

To promote water use efficiency in irrigation, financial assistance is provided to the states for development of infrastructure for micro-irrigation to facilitate use of sprinkler/drip irrigation as an alternative to construction of field channels. At least 10 per cent CCA of each project is to be covered under micro-irrigation. Micro-irrigation infrastructure includes components of sump, pump, high-density polyethylene pipelines, and pertinent devices needed for bringing efficiency in water conveyance and field applications (through sprinklers, rain guns, pivots, etc). In case of micro-irrigation, other components such as land levelling, drainage works, etc., would be reduced, or entirely discarded; enabling certain cost savings which is expected to offset the higher cost of micro-irrigation infrastructure.The devices - such as sprinkler/ rain gun/ drip sets, etc. - needed to be installed by individual farmers below farm outlets are not part of the micro-irrigation infrastructure. Farmers are expected to bear the cost of such devices or avail subsidies available in extant scheme of the Ministry of Agriculture.

Participatory Irrigation Management

The National Water Policy stresses participatory approach in water resource management. It has been recognised that participation of beneficiaries will help greatly in the optimal upkeep of irrigation system and effective utilisation of irrigation water. The participation of farmers in the management of irrigation would include transfer responsibility for operation and maintenance and also collection of water charges to the Water Users' Association in their respective jurisdiction. One-time

functional grant at ₹1,200 per hectare to be shared by the centre, state and farmers in the ratio of 45:45:10 respectively is being paid to outlet level water users associations as incentive, the interest from which is to be used for maintenance.

Flood Management

Flood Management Programme

During the XI Plan, the government launched Flood Management Programme for providing central assistance to the state governments for undertaking the works related to river management, flood control, anti-erosion, drainage development, flood proofing, restoration of damaged flood management works and anti-sea erosion works.

Another scheme Flood Management and Border Areas Programme (FMBAP) was merged with the Flood Management Programme (FMP) and River Management Activities and Works related to Border Areas (RMBA) schemes.

River Management Activities related to Border Areas

This central sector scheme is in place since 2014 to cover the major works/schemes during the XII Plan. It has the following components: (i) hydrological observations and flood forecasting on common border rivers with neighbouring countries; (a) flood forecasting on rivers common to India and Nepal; flood forecasting on rivers common to India and Nepal has been in operation with currently 46 meteorological/hydrometeorological sites in the Nepalese territory; (b) hydrological observations on rivers originating in Bhutan: this comprehensive scheme for establishment of flood forecasting network on rivers common to India and Bhutan is also in operation for transmission of real time data to control rooms in India. The cost of operation and maintenance of these sites in Bhutan is borne by India; (c) joint observations on rivers common to India and Bangladesh and cooperation with neighbouring countries: during lean season (January to May), the Ganga/Ganges waters is being shared at Farakka with Bangladesh, as per the provisions of the treaty signed between the two countries in 1996. The hydrological observations are being conducted jointly at Farakka (India) and Hardinge Bridge (Bangladesh) every year during the lean season. Further, during every monsoon, hydrological data of three

stations (Nugesha, Yangqen and Nuxia) on Brahmaputra and one station (Tsada) on Sutlej is provided by China to India as per existing MoUs and cost of maintenance of these stations is borne by India. The information provided by China is utilised in flood forecasting and advance warning.

Ganga Flood Control Commission

With the objective to effectively tackle critical and chronic flood problems in the Ganga Basin, Ganga Flood Control Board (GFCB) was set up in 1972. The functions include: to lay down the broad policies and decide priorities in the implementation of various schemes, and to issue necessary directions in respect of formulation of comprehensive plan for flood control in the Ganga basin and approval of schemes.

Ganga Flood Control Commission (GFCC), a subordinate office of this Ministry with its headquarters at Patna, was also created in 1972 to act as the secretariat and executive limb of GFCB and to deal with the floods and its management in Ganga Basin states.

There are 11 states in Ganga Basin, namely, West Bengal, Bihar, Uttar Pradesh, Jharkhand, Himachal Pradesh, Uttarakhand, Haryana, Rajasthan, Madhya Pradesh, Chhattisgarh and NCT Delhi. The river systems of Ganga basin are: (1) Gomati, (2) Adhwara Group, (3) Ghaghra, (4) Mahananda, (5) KamlaBalan, (6) Burhi Gandak, (7) Bagmati, (8) Punpun, (9) Kosi, (10) Gandak, (11) Ajoy, (12) Kiul-Harohar, (13) Damodar, (14) Mayurakshi, (15) Yamuna, (16) Ramganga, (17) Tons, (18) Badua-Chandan, (19) Rupnarain-Haldi-Rasulpur, (20) Jalangi, (21) Sone, (22) Tidal rivers and (23) Main Ganga. Most of these rivers are inter-state rivers.

Central Ground Water Board

Ground Water Development

There is considerable variation in groundwater potential in different parts of the country. While some areas like Indo-Gangetic Alluvium have huge ground water potential, many hard rock areas have limited groundwater resources. Similarly, the development of groundwater resources in different areas of the country has not been uniform. Highly intensive development of groundwater in certain areas in the country has resulted in over-exploitation, leading to decline in groundwater levels,

whereas in some other areas groundwater is still sub-optimally developed, leaving scope for future extraction. CGWB carries out periodic assessment of groundwater resources jointly with the state groundwater departments.

Aquifer Mapping and Formulation of Aquifier Management Plan

Aquifers are natural rock formations which can store and economically yield water. In the XII Plan, CGWB has taken up the National Project on Aquifer Management (NAQUIM) to facilitate identification, delineation, characterisation and effective management of Aquifers to ensure sustainability of groundwater resources. The major activities envisaged under the project include compilation of existing data, data gap analysis, generation of additional data for preparation of aquifer map and formulation of aquifer management plans. Each activity has a number of sub-activities and tasks which are being carried out as per detailed protocols for implementation.

Demonstrative Projects on Artificial Recharge to Groundwater and Rainwater Harvesting

CGWB has implemented demonstrative projects on artificial recharge to groundwater and rainwater harvesting in Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, former state of Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telengana, Uttar Pradesh, West Bengal and UT of Chandigarh.

Central Ground Water Authority

Central Ground Water Authority (CGWA) has been entrusted with the responsibility of regulating and controlling groundwater development and management in the country and issuing necessary directives for the purpose. The Authority performs the following functions: exercise of powers under Section 5 of the Environment (Protection) Act, 1986, for issuing directions and taking such measures in respect of all the matters referred to in sub-section (2) of Section 3 of the said Act; to resort to penal provisions contained in Sections 15 to 21 of the said Act; to regulate and control, management and development of groundwater in the country; and to issue necessary regulatory directions for the purpose.

Rajiv Gandhi National Ground Water Training and Research Institute

The Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWTRI) is the training arm of Central Ground Water Board and is located at Raipur, Chhattisgarh. It caters to the training requirements of Central Ground Water Board and other central and state government organisations, academic institutes, NGOs, etc. RGNGWTRI is implementing a three-tier (national level, state and block level) training programme keeping in view the requirements of the National Project on Aquifer Management. RGNGWTRI is also mandated to carry out research in the field of groundwater.

Central Water Commission

Central Water Commission (CWC) is headed by a Chairman, with the status of an ex-officio Secretary to the Government of India. The work of the Commission is divided among 3 wings, namely, Designs and Research Wing (D&R), Water Planning and Projects Wing (WP&P) and River Management Wing (RM). Each wing comprises a number of units/ organisations and is responsible for the disposal of tasks and duties falling within the scope of functions assigned to it. In order to achieve better management in the water resources sector and have better coordination with the state government departments, CWC has established 13 regional offices. The offices are located at Bengaluru, Bhopal, Bhubaneshwar, Chandigarh, Coimbatore, Delhi, Hyderabad, Lucknow, Nagpur, Patna, Shillong, Siliguri and Gandhinagar. National Water Academy, the training institute of CWC, is located at Pune for training of central and state in-service engineers, NGOs, etc.

Website: www.cwc.gov.in

Functions

CWC is charged with the general responsibility of initiating, coordinating and furthering in consultation with the state governments concerned, schemes for control, conservation and utilisation of water resources in the respective state for the purpose of flood management, irrigation, drinking water supply and water power generation. The Commission, if so required, can undertake the construction and execution of any such scheme. The main functions of CWC include: to carry out techno-economic appraisal of irrigation, flood control and multipurpose projects proposed by the state governments; to collect, compile, publish

and analyse the hydrological and hydro-meteorological data relating to major rivers in the country, consisting of rainfall, run-off and temperature, etc.; to collect, maintain and publish statistical data relating to water resources and its utilisation including quality of water throughout the country; to provide flood forecasting services to all major flood-prone inter-state river basins of the country; to undertake construction work of any river valley development scheme on behalf of the Government of India or state government concerned; to impart training to in-service engineers from central and state organisations in various aspects of water resource development; to promote modern data collection techniques such as remote sensing technology for water resources development, flood forecasting and development of related computer software; to carry out morphological studies to assess river behaviour, bank erosion/coastal erosion problems; and advise the central and state governments on all such matters.

Hydrological Observations

Central Water Commission is operating a network of 878 hydro-meteorological observation stations throughout the country on all major river basins to observe: (i) water level (gauge); (ii) discharge; (iii) water quality; (iv) silt; (v) selected meteorological parameters including snow observations at key stations. In addition, it also operates 76 exclusive meteorological observation stations. The data so collected is utilised for planning and development of water resources projects; climate change studies; water availability studies; flood/inflow forecasting; examination of international and inter-state issues; river morphological studies; inland waterway development; reservoir siItation studies; research related activities, etc.

Water Quality Monitoring

Central Water Commission is monitoring water quality at 429 key locations covering all the major river basins of India. It is maintaining a three-tier laboratory system for analysis of the physio-chemical parameters of the water. The level-l laboratories are located at 406 field water quality monitoring stations on major rivers of the country where physical parameters such as temperature, colour, odour specific conductivity, electrical conductivity, total dissolved solids, pH and dissolved oxygen of river water are observed. There are 18 level-ll

laboratories located at selected division offices to analyse 25 physio-chemical characteristics and bacteriological parameters of water. Five level-III/IIl+ laboratories are functioning at Varanasi, Delhi, Hyderabad, Coimbatore and Guwahati where 41 parameters including heavy metals/toxic parameters and pesticides are analysed. This data is used by different agencies for planning of water resources project, research purposes, etc. The water quality data being so collected are put in various uses related to planning and development of water resources projects.

Flood Forecasting

CWC has been making continuous endeavours for modernisation and expansion of its flood forecasting network in order to have desired automatic system of data collection and real time data transmission. So far, 510 data collection stations have been modernised; three earth receiving stations have been set up at New Delhi, Jaipur and Burla; 21 Modelling Centres have been equipped with latest computer systems for analysis of data, flood forecast formulation and its dissemination to concerned agencies expeditiously. For activities of flood forecasting, modernisation and expansion in XII Plan, another 458 stations alongwith 5 more modelling centres are being modernised with automatic data acquisition system with satellite based telemetry system in various basins in the country.

CWC is providing Flood Forecasting service at 226 stations, of which 166 are level forecasting stations on major rivers and 60 are inflow forecasting stations on major dams/barrages. Out of this, flood forecasting service at 27 stations was started in 2017. It covers 19 major river systems in the country and 19 states, viz., Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Telangana, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal and union territories, viz., Dadra, Nagar Haveli and Daman and Diu, National Capital Territory of Delhi and Jammu and Kashmir. During the flood season, CWC operates Flood Control Room on 24x7 basis in New Delhi and 24 division offices spread throughout the country for monitoring the situation. On an average, about 6,000 forecasts are being issued during season every year. Normally, these forecasts are issued 6 to 48 hours in advance, depending upon the river terrain, the locations of the

flood forecasting sites and base stations. In addition to conventional flood forecasting methodology, mathematical model forecasting based on rainfall-runoff methodology is also being used in some areas. This has enabled CWC to issue a 3-day advance flood advisory.

Morphological Studies

The study of river morphology and implementation of suitable river training work as appropriate have become imperative as large areas of the country are affected by floods every year causing severe damage to life and property in spite of existing flood control measures taken both by central and state governments. Problems are aggregating mainly due to large quantity of silt/ sediment being carried and deposited in its downstream reaches. The special behaviour of the river needs to be thoroughly understood for evolving effective strategies to overcome the problem posed by it. Morphological study of three rivers namely, Ghaghra, Sutluj and Gandak has been completed. Further, morphological studies of 15 rivers namely Ganga, Sharda, Rapti, Kosi, Bagmati, Yamuna, Bramhaputra, Subansiri, Pagladiya, Krishna, Tungbhadra, Mahananda, Mahanadi, Hooghly, and Tapti is under progress.

Design Consultancy

Central Water Commission is actively associated with design of majority of the mega water resources projects in India and neighbouring countries, viz., Nepal, Bhutan, Afghanistan, Myanmar, Sri Lanka and African countries by way of design consultancy or in the technical appraisal of the projects. Four design units are functioning to cater to specific requirements and to attend to special design-related problems of different regions.

Dam Rehabilitation & Improvement Project

Dam Rehabilitation and Improvement Project (DRIP) is the World Bank assisted project at an estimated cost of ₹ 2,100 crore with the provision of rehabilitation of about 223 large dams in the seven participating states (namely Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Tamil Nadu and Uttarakhand), along with institutional strengthening component for participating states and Central Water Commission.

National Register of Large Dams

As per the latest information compiled under the National Register of Large Dams (NRLD) maintained by CWC, there are 5,701 large dams in the country. Out of this, 5,254 large dams have been completed and 447 others are under construction. The NRLD is available on CWC website.

Water Resource Information System

CWC and ISRO jointly developed Water Resources Information System (India-WRIS) in 2010. Subsequently, four versions of the website of India-WRIS have been launched. The version 4.1 was launched in 2015 and is available in public domain at 1:250000 scale. The information system contains several GIS layers on water resources projects, thematic layers like major water bodies, land use/land cover, wastelands, land degradation, etc., environmental layers as well as infrastructure and other administrative layers. The information system has all the basic map viewing and navigation capabilities like zoom, overview, bookmark, table of contents, etc. As per the provision of Hydro-Meteorological Data Dissemination Policy 2013 (MoWR), all unclassified data of CWC G&D stations has been made available on this website.

Training & Capacity Building

Central Water Commission offers training to water sector professionals every year. These training programmes are organised at National Water Academy (NWA), CWC Headquarter and field offices of CWC. The National Water Academy, CWC is a centre of excellence for imparting training on all facets of Water Resources Development and Management covering the different areas of planning, design, evaluation, construction, operation and monitoring of water resources projects, and also the application of high-end technology in water sector.

National Water Academy

National Water Academy (NWA) is an institute established under Central Water Commission at Khadakwasla, Pune. The objective of NWA is to function as a "Centre of Excellence" in training and capacity building for all stakeholders on various aspects of water resources planning, development and management and to develop institutional capability at the national level for imparting training in new emerging technologies in this sector on continued basis. NWA conducts training

programmes on whole gamut of water resources development and management comprising both technical and non-technical areas.

Since its inception in 1988, NWA has contributed immensely in the capacity building and training in this sector for all stakeholders including Cadre Training Programmes for Central Water Engineering Services Officers; capacity building for state and central organisations; programmes under PMKSY; and programmes for all other stakeholders like teachers, non-governmental organisations (NGOs), Panchayat Raj Institutions (PRIs), media personnel, youth representatives, etc.

Central Soil and Materials Research Station

Central Soil and Materials Research Station (CSMRS), New Delhi, is a premier organisation in the country dealing with the field explorations, laboratory investigations, and basic and applied research in the field of geotechnical engineering and civil engineering materials, particularly for construction of river valley projects and safety evaluation of existing dams. The Research Station primarily functions as an adviser and consultant to various departments of Government of India, state governments and Central Undertakings. The Research Station has excellent facilities and highly qualified officers and has acquired some unique capabilities in the country in the field of geotechnical engineering and construction materials' characterisation. It is involved in the safety evaluation of existing hydraulic structures and quality control of construction for various river valley projects including for projects in neighbouring Bhutan and Nepal.

The sphere of activities of the Station is covered under the following core areas: soil mechanics including studies on expansive soils; studies on dispersive soils; hydraulic fracturing of core materials and quality control; rockfilI; soil dynamics; geosynthetics; numerical modelling and quality control concrete diagnostics and chemistry including diagnostic investigation/health monitoring; material for repair and rehabilitation; petrography; chemical investigation; durability of concrete; chemistry and mineralogy; water quality; alkali aggregate reaction; new material such as polymer, grout, etc.; rock mechanics (I) including foundation rock characterisation; and in-situ measurements such as in-situ stresses and deformability, geophysical investigations, numerical modelling.

Website: www.csmrs.gov.in

Farakka Barrage Project

Farakka Barrage Project with headquarters at Farakka in Murshidabad district of West Bengal is a subordinate office under the Ministry of Water Resources, River Development and Ganga Rejuvenation. The Farakka Barrage Project Authority was set up in 1961 with the mandate to execute and thereafter operate and maintain the Farakka Barrage Project Complex comprising Farakka Barrage, Jangipur Barrage, Feeder Canal, Navigation Lock and associated structures.

The Barrage comprises 112 gates (108 main gates and 4 fish lock gates) besides 11 head regulator gates for diversion of approximately 40,000 cusecs (1,035 cusecs) of discharge into the feeder canal. The main objective of the Project is to divert adequate quantity of Ganga waters to Bhagirathi-Hoogly river system through 38.38 km long feeder canal for preservation and maintenance of Kolkata Port by improving the regime and navigability of the Bhagirathi-Hoogly river system. Further, with the successful accomplishment of time-specific anti-erosion and bank protection works in critical reaches on river Ganga/Padma, FBP authority has been able to ensure the safety of Farakka Barrage besides providing reasonable protection from floods to lives and livelihood of local people in the region. Apart from above, Farakka Barrage Project is facilitating implementation of India-Bangladesh Ganga Water Treaty-1996 on sharing of Ganga water between India and Bangladesh.

Website : www.fbp.gov.in

Betwa River Board

Betwa River Board (BRB) was constituted in 1976 to execute the Rajghat Dam Project and Power House. The project authority started construction of the project under the overall guidance of Betwa River Board Act, 1976. The benefits and cost of the above project are shared equally by Uttar Pradesh and Madhya Pradesh.

Sardar Sarovar Construction Advisory Committee

The Sardar Sarovar Construction Advisory Committee (SSCAC) was constituted by the Government of India in accordance with the directives of the Narmada Water Disputes Tribunal (NWDT) in 1980.

The functions of SSCAC include: scrutinising the project estimates of dam and powerhouse works and recommend for the administrative approval; examining and recommending on all proposals pertaining to technical features and designs; exploring the requirement of funds for the construction of works and other purposes according to the approved programme; and recommending on all sub-estimates and contracts, the cost of which exceeds the powers of project officers.

Website : www.sscac.gov.in

Tungabhadra Board

The Tungabhadra Board was constituted in 1953. The Board consists of representations from Andhra Pradesh, Karnataka, Telangana and Government of India. In the discharge of its assigned functions, the Board exercises powers of a state government. It makes rules for the conduct of its own business. The governments of Andhra Pradesh, Telangana and Karnataka provide funds in agreed proportions and also depute staff to man the various specified posts, as per an agreed proportion.

Website: www.tbboard.gov.in

Upper Yamuna River Board

Upper Yamuna River Board (U YRB) is a subordinate office under this Ministry. The Board was constituted in 1994 with Himachal Pradesh, Haryana, Uttar Pradesh, Rajasthan and National Capital Territory of Delhi as its measure.

It consists of Member, Central Water Commission and one nominee each from Uttar Pradesh, Uttarakhand, Haryana, Rajasthan, Himachal Pradesh, and National Capital Territory of Delhi. The main function of the Board is to regulate the allocation of available flows amongst the beneficiary states and also monitoring the return flows; monitoring conserving and upgrading the quality of surface and groundwater; maintaining hydro-meteorological data for the basin; overviewing plans

for watershed management; monitoring and reviewing the progress of all projects up to and including Okhla barrage.

Website : www.uyrb.gov.in

Brahmaputra Board

Brahmaputra Board, an autonomous statutory body, was set up and started functioning in 1982. The jurisdiction of Brahmaputra Board includes both Brahmaputra and Barak valley and covers all the states of north-eastern region, Sikkim and northern part of West Bengal falling under Brahmaputra basin. The major functions of the Board are to carry out survey and investigation and to prepare Master Plan for control of flood, bank erosion and improvement of drainage congestion, development and utilisation of water resources of the Brahmaputra and Barak River system for irrigation, hydro power, navigation and for other beneficial purposes.

Website : www.brahmaputraboard.gov.in

Narmada Water Dispute Tribunal Award

The Narmada Water Dispute Tribunal (NWDT) was constituted in 1969 to adjudicate upon the water dispute pertaining to river Narmada. The tribunal has ordered setting up of machinery for implementing its directions and decisions. Accordingly, the central government framed the Narmada Water Scheme interalia constituting the Narmada Control Authority (NCA).

Krishna River Management Board

Krishna River Management Board (KRMB) was constituted in 2014 with autonomous status under this Ministry. The functions of the Board are: to regulate the water supply from projects to the respective states with regard to: awards granted by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956; any agreement entered into or arrangement made covering the Andhra Pradesh government and any other state or union territory; the construction of such remaining ongoing or new works connected with the development of the water resource projects relating to the rivers or their tributaries through the successor

states as the central government may specify; making an appraisal of any proposal for construction of new projects on Godavari or Krishna rivers and giving technical clearance, after satisfying that such projects do not negatively impact the availability of water as per the awards of the Tribunals constituted under the Inter-State River Water Disputes Act, 1956, for the projects already completed or taken up before the appointed day; and such other functions as the central government may entrust to it on the basis of the principles specified in the Eleventh Schedule.

Polavaram Project Authority

Polavaram Irrigation Project is a multi-purpose irrigation project which is on the river Godavari near Ramayyapeta village of Polavarammandal about 42km upstream of Sir Arthur Cotton Barrage, where river emerges out of last range of the Eastern Ghats and enters the plains in West Godavari District of Andhra Pradesh. It envisages construction of a dam to create ultimate irrigation potential of 2.91 lakh ha. The project also envisages generation of 960 MW of hydro power; drinking water supply to a population of 28.50 lakh in 540 villages; diversion of 80 TMC of water to Krishna river basin; and sharing of 5 TMC and 1.5 TMC water with Odisha and Chhattisgarh, respectively. It creates an irrigation potential of 7.2 lakh acres (2.91 lakh ha) in East Godavari, Visakhapatnam, West Godavari and Krishna districts.

Indo-Bangladesh Water Resources Cooperation

An Indo-Bangladesh Joint Rivers Commission (JRC) is functioning since 1972 with a view to maintain liaison in order to ensure most effective joint efforts in maximising the benefits from common river systems. A treaty was signed by the Prime Ministers of India and Bangladesh in 1996 for the sharing of Ganga/Ganges waters at Farakka during the lean season. As per the treaty, the Ganga/Ganges waters is being shared at Farakka (which is the last control structure on river in India) during lean period, from 1st January to 31st May every year, on 10-daily basis as per the formula provided in the treaty. The validity of treaty is 30 years.

India-Nepal Water Resource Cooperation

The management of floods due to the rivers flowing into India from Nepal has been a concern and the related issues are discussed in the existing Indo-Nepal bilateral mechanisms comprising: (i) Joint Ministerial Commission on Water Resources (JMCWR); (ii) Joint Committee on Water Resources (JCWR); (iii) Joint Standing Technical Committee (JSTC); (iv) Joint Committee on Inundation of Flood Management (JCIFM); and (v) Joint Committee on Kosi Gandak Projects (JCKGP). Government of India has been constantly persuading the Government of Nepal for construction of storage dams on these rivers for mutual benefit of the two countries.

Indus Waters Treaty

Under the Indus Waters Treaty 1960, India and Pakistan have each created a permanent post of Commissioner for Indus Waters. Each Commissioner is the representative of his government and serves as a regular channel of communication on all matters relating to implementation of the Treaty. The two Commissioners together form the Permanent Indus Commission (PIC).

National Water Development Agency

The National Water Development Agency was set up in 1982 to study the feasibility of the links under peninsular component of national perspective plan. The NWDA is fully funded by Government of India. Its functions were subsequently modified from time to time and the present functions include: (a) to carry out detailed survey and investigations of possible reservoir sites and inter-connecting links in order to establish feasibility of the proposal of peninsular river development and Himalayan river development components forming part of the National Perspective for Water Resources Development; (b) to carry out detailed studies about the quantum of water in various peninsular river systems and Himalayan river systems which can be transferred to other basins/states after meeting the reasonable needs of the basin/states in the foreseeable future; (c) to undertake/ construct/repair/renovate/rehabilitate/implement the projects either on its own or through an appointed agency/organisation/PSU or company and the projects forming part of interlinking of rivers, for completion of

projects falling under PMKSY of which projects under Accelerated Irrigation Benefits Programme are also included and similar other projects.

National Institute of Hydrology

The National Institute of Hydrology (NIH), established in 1978 as an autonomous organisation under this Ministry, is a premier R&D institute in the country to undertake, aid, promote and coordinate basic, applied and strategic research on all aspects of hydrology and water resources development. The Institute has its headquarters at Roorkee (Uttarakhand). To carry out field related research covering different regions of the country, it has four regional centres located at Belgaum, Jammu, Kakinada and Bhopal, and two centres for Flood Management Studies at Guwahati and Patna.

The objectives of the Institute are: (a) to undertake, aid, promote and coordinate systematic and scientific work on all aspects of hydrology; (b) to cooperate and collaborate with other national and international organisations in the field of hydrology; (c) to establish and maintain a research and reference library in pursuance of the objectives of the society and equip the same with books, reviews, magazines and other relevant publications; and (d) to do all other such things as it may consider necessary, incidental or conducive to the attainment of the objectives for which the Institute has been established. To fulfil these objectives, the Institute has established state-of-the-art laboratory facilities in nuclear applications in hydrology, water quality, soil water, remote sensing and GIS applications, snow and glacier, numerical groundwater modelling and hydrological instrumentation.

The Institute acts as a centre of excellence for transfer of technology, human resources development and institutional development in specialised areas of hydrology, and conducts user-defined, demand-driven research through collaboration with relevant national and international organisations.

National Projects Construction Corporation Limited

National Projects Construction Corporation Limited (NPCC) was established in 1957 as a premier construction company to create

necessary infrastructure for economic development of the country. NPCC comply with quality management requirements of ISO 9001-2008 for execution of civil works for thermal and hydroelectric projects; river valley projects; industrial structures; project management consultancy services for buildings, housings, roads, bridges; and infrastructure projects. In its 59 years of existence, the Corporation has successfully associated itself with completion of several national projects from concept to commissioning stage. Some of them are in remote and hazardous locations of the country.

Water and Power Consultancy Services

To utilise the expertise of the engineers who had carried out pioneering work and to share the knowledge and experience with other developing countries and in turn earning foreign currency, Water and Power Consultancy Services (WAPCOS) was established in 1969. WAPCOS provided opportunities to Indian engineers to work in diverse geographical and climatic regions thereby enhancing India's knowledge and expertise. India came to be recognised for its cost-effective technical know-how and dedicated technical manpower. Diplomatic initiatives were facilitated to forge long-term friendships with other developing countries and consultancy services contributed in their own small way in the economic development by earning valuable foreign exchange. Gradually, other consultancy organisations established themselves and finally earned name and fame on the strength of the Indian human resources and innovative technology.

Main fields of specialisation of the company cover irrigation; drainage and water management; groundwater exploration and minor irrigation; flood control and river morphology; river management; dams and reservoir engineering; water bodies and land conservation; agriculture; watershed management; natural resources management; hydropower; thermal power; pumped storage project; transmission and distribution; rural electrification; non-conventional sources of energy; water supply; sanitation and drainage; environment; ports; harbours and inland waterways; urban and rural areas development; roads and highway engineering; and buildings and townships. The company provides

concept to commissioning services for developmental projects in India and abroad.

Consultancy services have made a niche in the innovative as well as conventional fields and have effectively contributed in the development process of the nation. Healthy growth trends all over the world call for requisition of services of consultants for high-quality jobs and realisation of the need for professional involvement has widened the vistas for consultants to operate.

Immediately after independence, attention was focused on the construction of water resources and power projects across India. Nearly 4,300 large dams (including 695 under construction) have been built and constructed along with canal systems and allied structures. Some of the multipurpose projects like Bhakra Dam, Hirakud Dam, Nagarjuna Dam and Dantewada Dam find mention amongst the world's largest projects. In the first two decades after independence, foreign consultants had to be engaged for the planning and construction of large dams.

North Eastern Regional Institute of Water and Land Management

The North Eastern Regional Institute of Water and Land Management (NERIWALM) was established at Tezpur, Assam by North Eastern Council (NEC), in 1989. The Institute is under the administrative control of this Ministry. The Institute is situated 3 km away from the historically famous town of Tezpur, Sonitpur district of Assam which is located on the north bank of mighty river Brahmaputra at about 180 km from Guwahati. It is connected by road, rail and air with other parts of the country.

The main objective of the Institute is to provide capacity building, undertake research and provide technical services to the line departments in order to improve agricultural production and socio-economic status of the people in north east.

Minor Irrigation and Water Bodies Census

A Centrally Sponsored Scheme, Rationalisation of Minor Irrigation Statistics (RMIS) was launched in 1987-88 in the Ministry of Water

Resources, with cent per cent assistance to the states/UTs. During the Eleventh Five Year Plan, the RMIS scheme was converted as one of the components of the Central Sector Scheme - Development of Water Resources Information System (DWRIS). In 201718, the scheme was renamed as “Irrigation Census” and brought underthe umbrella scheme, namely, Prime Minister’s Krishi Sinchayee Yojana and others. The main objective of the Irrigation Census scheme is to build up a comprehensive and reliable database in the Minor Irrigation (Ml) sector for effective planning and policy making. Under it, each state/UT has identified a nodal department for compilation of minor irrigation statistics for the entire state/UT.

Database on Minor Irrigation (Ml) schemes plays an important role in policy formulation for water resources available in the country. Ml censuses are a rich source of information on India’s groundwater sector. In the Ml Censuses detailed information on various aspects/parameters like irrigation sources (dug well, shallow tube well, medium tube well, deep tube well, surface flow and surface lift schemes); irrigation potential created; potential utilised; ownership; holding size of land by the owner; devices used for lifting water; source of energy; energy conserving devices such as sprinkler and drip irrigation; use of non-conventional energy sources such as solar pumps; windmills etc. is collected.

Detailed database on minor irrigation works in the country has been generated through five censuses carried out under the scheme so far with reference years 1986-87,1993-94,2000-01,2006-07 and 2013-14 respectively.The census reports are available on the website of this Ministry.

28 Welfare

IN 1985-86, the erstwhile Ministry of Welfare was bifurcated into the Department of Women and Child Development and the Department of Welfare. Simultaneously, the Scheduled Castes Development Division, Tribal Development Division and the Minorities and Backward Classes Welfare Division were shifted from the Ministry of Home Affairs and also the Wakf Division from the Ministry of Law to form the then Ministry of Welfare.

Subsequently, the name of the Ministry was changed to the Ministry of Social Justice and Empowerment in May 1998. Further, in October 1999, the Tribal Development Division was moved out to form a separate Ministry of Tribal Affairs. In January 2007 the Minorities Division along with Wakf Unit were moved out of the Ministry and formed a separate Ministry and the Child Development Division was merged with the Ministry of Women and `Development..

Two departments have been created under the Ministry of Social Justice and Empowerment namely: (i) Department of Social Justice and Empowerment (Samajik Nyaya and Adhikarita Vibhag); and (ii) Department of Disability Affairs (Nishaktata Karya Vibhag) since renamed as Department of Empowerment of Persons with Disabilities (Divyangjan).

The Department of Social Justice and Empowerment is responsible for the development/updation of legislation, policies and guidelines at the national level for effective implementation of the Department's objectives. It oversees the implementation of the various existing laws including (i) Protection of Civil Rights Act, 1955; (ii) The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989; (iii) Maintenance and Welfare of Parents and Senior Citizens Act, 2007; (iv) National Commission for Backward Classes Act, 1993 which now stands repealed; and (v) The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013. The National Policy for Older Persons 1999 is also administered by the Department.

Websites: www.socialjustice.nic.in
www.disabilityaffairs.gov.in

Events Related to Scheduled Caste Welfare

Celebration of Constitution Day

On August 29,1947, the Constituent Assembly set up a Drafting Committee under the Chairmanship of Dr. B.R Ambedkar to prepare a draft Constitution for India. It was adopted by the Constituent Assembly on November 26, 1949, and came into effect on January 26, 1950. With its adoption, the Union of India became the modern and contemporary Republic of India replacing the Government of India Act 1935 as the country's fundamental governing document. The Constitution declares India as a sovereign, socialist, secular, democratic republic, assuring its citizens of justice, equality, and liberty, and endeavours to promote fraternity among them. Dr. B.R Ambedkar is regarded as the principal architect in the framing of the Constitution of India which is the longest written constitution of any sovereign country in the world. The Constitution of India is the supreme law of India. It provides a legal framework for social transformation from a society of castes and communities to a modern society of citizens based on equal consideration of individuals without regard for caste, creed or gender. The national committee that was formed under the chairmanship of the Prime Minister for celebrating the 125th Birth Anniversary of Dr. B.R. Ambedkar, decided to increase awareness about the Constitution.

Welfare of Scheduled Castes and Scheduled Tribes

The Constitution contains several provisions in the nature of safeguards for the Scheduled Castes. The following two Acts specifically aim at curbing: (i) untouchability and (ii) atrocities against SCs and STs, and are therefore very important for the Scheduled Castes: (a) The Protection of Civil Rights Act, 1955, and (b) The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.

Protection of Civil Rights

In pursuance of Article 17 of the Constitution of India, the Untouchability (Offences) Act, 1955 was enacted. Subsequently, it was amended and renamed in 1976 as the Protection of Civil Rights Act, 1955. Rules under this Act, viz., The Protection of Civil Rights Rules, 1977 were notified in 1977. The Act extends to the whole of the country and provides punishment for the practice of untouchability. It is implemented by the respective state governments and union territory administrations.

Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act

The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989 (The PoA Act) came into force in 1990. This legislation aims at preventing commission of offences by persons other than scheduled castes and scheduled tribes against scheduled castes and scheduled tribes.

Comprehensive Rules under this Act, titled Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Rules, 1995 were notified in 1995, which, inter alia, provide norms for relief and rehabilitation.

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2015 and 2016

Despite the deterrent provisions made in the PoA Act, continuing atrocities against the members of Scheduled Castes (SCs) and Scheduled Tribes (STs) had been a cause of concern. High incidence of occurrences of offences against members of SCs and STs also indicated that the deterrent effect of the PoA Act was not adequately felt by the accused. It was, therefore, considered appropriate to strengthen the Act and make the relevant provisions more effective. Based on the consultation process with all the stakeholders, amendments in the PoA Act were proposed to broadly cover five areas. There have been addition of several new offences and rephrasing of existing ones. The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2018, inserts Section A after Section 18, which is as follows:

”I8A. (1) For the purposes of this Act—(a) preliminary enquiry shall not be required for registration of a First Information Report against any person; or (b) the investigating officer shall not require approval for the arrest, if necessary, of any person, against whom an accusation of having

committed an offence under this Act has been made and no procedure other than that provided under this Act or the Code shall apply; (c) the provisions of Section 438 of the Code shall not apply to a case under this Act, notwithstanding any judgment or order or direction of any Court."

National Commission for Scheduled Castes

The National Commission for SCs and STs (NCSC) which was set up under Article 383 of the Constitution in 1990 was bifurcated into two Commissions namely, National Commission for Scheduled Castes and National Commission for Scheduled Tribes after the 89th Constitutional (Amendment) Act, 2003. The National Commission for Scheduled Castes is responsible for monitoring the safeguards provided for Scheduled Castes and also to review issues concerning their welfare. Functions of the NCSC as enumerated in the Article 338(5) of the Constitution are: (a) to investigate and monitor all matters relating to the safeguards provided for the scheduled castes under the Constitution or under any other law for the time being in force or under any order of the government and to evaluate the working of such safeguards; (b) to inquire into specific complaints with respect to the deprivation of rights and safeguards of the scheduled castes; (c) to participate and advise on the planning process of socio-economic development of the scheduled castes and to evaluate the progress of their development under the Union and any state; (d) to present to the President, annually and at such other times as the Commission may deem fit, reports upon the working of those safeguards; (e) to make in such reports, recommendations as to the measures that should be taken by the Union or any state for the effective implementation of those safeguards and other measures for the protection, welfare and socio-economic development of the scheduled castes; and (f) to discharge such other functions in relation to the protection, welfare and development and advancement of the scheduled castes as the President may, subject to the provisions of any law made by Parliament, by rule specify.

Revision of the Scheme

The Scheme was last revised in April 2018 wherein, inter alia, desired service delivery mechanisms have been defined as follows: (i) online end-to-end processing and verification of eligibility credentials to ensure greater transparency and to control duplication, wrong claims by

institutions, (ii) mandatory payment of maintenance allowance and non-refundable fee to bank accounts of student beneficiaries only.

Website: www.ncsc.nic.in

Educational Empowerment

Pre-Matric Scholarship

This is a centrally sponsored scheme, which is implemented by the state governments and union territory administrations, which receive 100 per cent central assistance for the total expenditure under the scheme, over and above their respective committed liability. The level of committed liability of respective state governments/union territory administrations for a year is equivalent to the level of actual expenditure incurred by them under the Scheme during the terminal year of the last Five Year Plan. It was started in 1977-78. Initially, it covered only hostellers. Subsequently, in 1991 day scholars were also brought within its purview. Under the Scheme, financial assistance is provided for pre-matric education to children of the following target groups, viz., (i) scavengers of dry latrines; (ii) tanners; (iii) flayers; and (iv) waste pickers.

Pre-Matric Scholarship for SC Students

The Scheme was introduced in 2012. It is centrally sponsored and implemented by the state governments and union territory administrations, which provides 100 per cent assistance from Government of India for expenditure under the Scheme, over and above their committed liability. The level of committed liability of a state government/union territory administration for a year will be equivalent to the level of actual expenditure incurred by them under the Scheme during the terminal year of the previous Five Year Plan Period, and will be required to be borne by them by making provision in their own budget.

National Overseas Scholarship for SCs

The Scheme provides for fees charged by institutions as per actual, monthly maintenance allowance, passage visa fee and insurance premium, annual contingency allowance and incidental journey allowance. Only two children of the same parents/ guardians are eligible to get benefit under the Scheme. The second child of the same

parents/guardian will be considered only if the slots are still available for that year. The prospective awardees should not be more than 35 years of age. The total number of awards (maximum) to be given each year is 100 and 30 per cent of the awards have been earmarked for women candidates. During 2016-17 the unfilled slots of 2014-15 and 2015-16 were carried forward to 2016-17. Financial assistance under the Scheme is provided for a maximum period of 4 years for Ph.D and 3 years for Masters programme. The income ceiling from all sources of the employed candidate or his/her parents/guardians should not be more than ₹ 50,000 per month

Babu Jagjivan Ram Chhatrawas Yojana

The objective of the Scheme is to provide hostel facilities to SC boys and girls studying in middle schools, higher secondary schools, colleges and universities. The state governments/union territory administrations and the central and state universities/institutions are eligible for central assistance, both for fresh construction of hostel buildings and for expansion of the existing hostel facilities while NGOs and deemed universities in the private sector can avail the benefit only for expansion of their existing hostel facilities.

Rajiv Gandhi National Fellowship for SC Students

The Scheme provides financial assistance to scheduled caste students for pursuing research studies leading to M.Phil., Ph.D., and equivalent research degree in universities, research institutions and scientific institutions. University Grants Commission (UGC) is the nodal agency for implementing the Scheme. About 2000 Junior Research Fellowships (JRF) per year are awarded to scheduled caste students. Number of fellowships were increased from 1,333 in 2010 to 2,000 in 2011. In case of non-availability of adequate number of scheduled caste candidates, the number of fellowships not availed during a year are carried forward to the next academic session. In case the number of candidates exceeds the number of available awards, the UGC selects the candidates based on the percentage of marks obtained by the candidates in their post graduation examination. There is no income ceiling prescribed under the Scheme.

Special Central Assistance

Scheduled Castes Sub Plan

Special Central Assistance (SCA) to Scheduled Castes Sub Plan (SCSP) is a central sector Scheme, started in 1980, under which 100 per cent grant is given to the states/UTs, as an additive to their Scheduled Castes Sub Plan (SCSP). The main objective is to give a thrust to family-oriented schemes of economic development of SCs below the poverty line.

Scheduled Castes Development Corporations

The centrally sponsored scheme for participating in the equity share of the Scheduled Castes Development Corporations (SCDCs) in the ratio of 49:51 (central/state) was introduced in 1979. At present, SCDCs are functioning in 27 states/UTs. The main functions of such corporations are identification of eligible SC families and motivating them to undertake economic development schemes, sponsoring the schemes to financial institutions for credit support, providing financial assistance in the form of margin money at low rate of interest and subsidy in order to reduce the repayment liability and providing necessary tie-up with other poverty alleviation programmes. These Corporations are playing an important role in providing credit and inputs by way of margin money loans and subsidy to the target group.

National Scheduled Castes Finance and Development Corporation

The National Scheduled Castes Finance and Development Corporation (NSFDC) was set up in 1989 under Section 8 of the Companies Act, 2013 (formerly Section 25 of the Companies Act, 1956). The broad objective of NSFDC is to provide financial assistance in the form of concessional loans to scheduled caste families, and skill-cum-entrepreneurial training to the youth of the target group, living below double the poverty line for their economic development.

Venture Capital Fund for Scheduled Castes

Government announced the setting up of a Venture Capital Fund for Scheduled Castes in 2014. This was to promote entrepreneurship among the scheduled castes and to provide concessional finance to them.

Credit Enhancement Guarantee Scheme for Scheduled Castes

In 2014, the government announced that a sum of ₹ 200 crore will be allocated towards credit enhancement facility for young and start-up entrepreneurs, belonging to scheduled castes, who aspire to be part of

neo-middle class category with an objective to encourage entrepreneurship in the lower strata of the society resulting in job creation.

Welfare of Persons with Disabilities

In order to give focused attention to different policy issues and meaningful thrust to the activities aimed at welfare and empowerment of the Persons with Disabilities, a separate Department of Disability Affairs was carved out of the Ministry of Social Justice and Empowerment in 2012. The Department acts as a nodal agency for matters pertaining to disability and persons with disabilities including effecting closer coordination among different stakeholders—related central ministries, state/UT governments, NGOs etc.—in matters pertaining to disability. According to Census 2011, there are 2.68 crore persons with disabilities in the country (who constitute 2.21 per cent of the total population). Out of the total population of persons with disabilities, about 1.50 crore are men and 1.18 crore are women. These include persons with visual, hearing, speech and locomotor disabilities, mental illness, mental retardation, multiple disabilities and other disabilities.

Constitutional Provisions

The Constitution of India through its Preamble, inter alia, seeks to secure to all its citizens, justice, social, economic and political; liberty of thought, expression, belief, faith and worship; equality of status and of opportunity. Part-Ill of the Constitution provides for a set of six Fundamental Rights to all the citizens (and in a few cases to non-citizens also). These include - Right to Equality; Right to Freedom; Right against Exploitation; Right to Freedom of Religion; Cultural and Educational Rights and Right to Constitutional Remedies. All these rights are also available to the Persons with Disabilities even though no specific mention of such persons appear in this Part of the Constitution.

The Directive Principles of State Policy have been incorporated in Part- IV of the Constitution. Even though non-justiciable, these have been declared as fundamental in the governance of the country. These principles are intended to be the imperative basis of State policy. These are really in the nature of instructions issued to future legislatures and executives for their guidance. Article 41- Right to work, to education and

to public assistance in certain cases, provides: “The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in case of unemployment, old age, sickness and disablement and in other cases of undeserved want”. Besides, Eleventh Schedule to Article 243-G and Twelfth Schedule to Article 243-W, which pertain to the powers and responsibilities of the Panchayats and municipalities respectively with respect to implementation of schemes for economic development and social justice, include welfare and safeguarding the interests of Persons with Disabilities among other weaker sections of the society.

The Department deals with the following legislations governing different aspects of disability and welfare and empowerment of the Persons with Disabilities—The Rehabilitation Council of India Act, 1992; The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995; and The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999.

Department of Empowerment of Persons with Disabilities (DEPwD) has formulated the Accessible India Campaign (Sugamya Bharat Abhiyan), as a nationwide campaign for achieving universal accessibility for PwDs. The campaign targets three separate verticals for achieving universal accessibilities, namely, the built-up environment, transportation ecosystem and information and communication ecosystem. The campaign has ambitious targets with defined timelines and will use IT and social media for spreading awareness about the campaign and seeking commitment/engagement of various stakeholders. The Department has asked various states to identify about 50 to 100 public buildings in big cities and also to identify citizen-centric public websites, which if made fully accessible would have the highest impact on the lives of PwDs. Once identified, “Access Audit” of these buildings and websities will be conducted by professional agencies. As per the audit findings, retrofitting and conversion of buildings, transport and websites would be undertaken by various government departments. This will be supported by the Scheme of Implementation of Persons with Disabilities Act (SIPDA), an umbrella scheme run by the DEPwD for implementing various initiatives for social and economic empowerment of PwDs.

The Department is collaborating with Ministry of Home, Ministry of Health and Family Welfare and Ministry of Tourism for creating 'accessible police stations', 'accessible hospitals' and 'accessible tourism' respectively across the country. The Department is also coordinating with the Ministry of Information and Broadcasting for enhancing accessibility of television programmes by incorporating features like captioning, text to speech and audio description. DEPwD is also in the process of creating a mobile app, along with a web portal for crowdsourcing the request regarding inaccessible places. With the app downloaded on his/her mobile phone, any person would be able to click a photograph or video of an inaccessible public place (like a school, hospital, government office etc.) and upload the same to the Accessible India portal. The portal will process the request for access audit, financial sanction and find retrofitting of the building to make it completely accessible.

Persons with Disability

Section 2 (t) of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, defines a person suffering from not less than 40 per cent of any disability as certified by a medical authority: (a) the disability being blindness; (b) low vision; (c) leprosy cured; (d) hearing impairment; (e) loco-motor disability; (f) mental illness; (g) mental retardation; (h) autism (i) cerebral palsy; or (j) a combination of any two or more of (g), (h) and (i) (Section 2 (i) of the PwD Act, 1995 read alongwith Section 2(j) of The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999).

Mental Health Act

Mental illness has been recognised as one of the disabilities under the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. The treatment and care of the mentally ill persons are governed by the Mental Health Act, 1987. The Act is administered by the Ministry of Health and Family Welfare.

Persons with Disabilities Act

A comprehensive law, namely, the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, was enacted and enforced in 1996. The law deals with both prevention and

promotion aspects of the rehabilitation such as education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation services for persons with disabilities, institutional services and supportive social security measures like unemployment allowance and grievance redressal machinery both at the central and state levels. National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities is a statutory body under The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999. The main objectives of the Trust are to enable and empower persons with these disabilities to live independently as fully as possible, to extend support to registered organisations providing need-based services and to evolve procedure for appointment of legal guardians for persons with disabilities requiring such protection.

Chief Commissioner for Persons with Disabilities

The Chief Commissioner is an important statutory functionary, appointed under Section 57 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. The functions and duties of the Chief commissioner include: coordinating the work of state commissioners for persons with disabilities, monitoring of utilisation of funds disbursed by the central government, taking steps to safeguard rights and facilities made available to persons with disabilities and also to look into complaints with respect to deprivation of rights of persons with disabilities. The Chief Commissioner can also take *suo moto* notice of non-implementation of any rule, law, etc., meant for persons with disabilities and is vested with the powers of a civil court relating to summoning of witness, discovery, requistioning and production of any document, etc.

Rehabilitation Council of India

The Rehabilitation Council of India is a statutory body set up under the Rehabilitation Council of India Act, 1992. The Council is responsible for regulating the training policies and programmes for various categories of professionals in the area of rehabilitation and special education. Its functions include: (i) standardisation and regulation of training courses at different levels in all the training institutions throughout the country; (ii) recognition of institutions/ universities

running training courses in the area of rehabilitation of the disabled within and outside the country on a reciprocal basis; (iii) promotion of research in rehabilitation and special education; (iv) maintenance of a central rehabilitation register for professionals possessing the recognised rehabilitation qualifications in the area of rehabilitation; and (v) encouragement of continuing rehabilitation education programmes in collaboration with organisations working in the area of disability.

Website: www.rehabcouncil.nic.in

National Institutes

In order to effectively deal with the multi-dimensional problem of the disabled population, the following national institutes/apex level institutes have been setup in each major area of disability: (i) National Institute for the Visually Handicapped, Dehradun; (ii) National Institute for Orthopaedically Handicapped; Kolkata; (iii) Ali Yavar Jung National Institute for the Hearing Handicapped; Mumbai; (iv) National Institute for the Mentally Handicapped; Secunderabad; (v) National Institute of Rehabilitaion Training and Research; Cuttack; (vi); Institute for the Physically Handicapped; New Delhi; and (vii) National Institute for Empowerment of Persons with Multiple Disabilities, Chennai. These institutes are mainly responsible for conducting innovative researches, organise training programmes for manpower development and deliver services in the country. Artificial Limbs Manufacturing Corporation of India (ALIMCO), Kanpur, is a public sector body, engaged in manufacturing of aids and appliances for persons with disabilities. The products manufactured by the Corporation conform to ISI standards approved by the Bureau of Indian Standards. Marketing of products isdone through regional marketing centres at Kolkata, Mumbai, Chennai, Bhubaneshwar and Delhi and also through national institutes and voluntary organisations.

Five Composite Regional Centres (CRCs) for the Persons with Disabilities are located at Srinagar, Lucknow, Bhopal, Sundernagar and Guwahati. These centres conduct training programmes to prepare professionals in the field of rehabilitation as well as provide rehabilitation services to the disabled. Four Regional Rehabilitation Centres for Spinal Injuries and Other Disabilities at Mohali, Cuttack, Jabalpur and Bareilly are providing services for basic management and

follow-up of the spinally injured so as to make the affected persons functionally independent.

Economic Development

The National Handicapped Finance and Development Corporation (NHFDC) is an apex-level financial institution for extending credit facilities to persons with disabilities for their economic development. Funds assistance is disbursed through the channelising agencies authorised by the state governments/UT administrations and non-governmental organisations. It also extends loans for pursuing education at graduate and higher levels. Besides, it assists in the upgradation of technical and entrepreneurial skills to enable beneficiaries to manage their production units efficiently.

Website: www.nhfdc.nic.in

Assistance to Disabled Persons for Purchase of Appliances

Under the Scheme for Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances assistance is given for procuring durable, sophisticated and scientifically manufactured, standard aids and appliances that can promote their physical, social and psychological rehabilitation by reducing the impact of disability and enhance their economic potential. It is implemented through agencies like voluntary organisations, national institutes under the Ministry, ALIMCO, Zilla Panchayats, DRDAs, etc. The implementing agencies are provided grants-in-aid for purchase, fabrication and distribution of aids and appliances. The Scheme also includes under its ambit medical/surgical correction and intervention that may be essential prior to fitment of aids and appliances.

Tribal Affairs

Development of Scheduled Tribes

The Ministry of Tribal Affairs was set up in 1999 after the bifurcation of Ministry of Social Justice and Empowerment with the objective of providing more focused approach on the integrated socio-economic development of the Scheduled Tribes (STs), the most underprivileged of the society, in a coordinated and planned manner. Before the formation of the Ministry, tribal affairs was handled by different ministries at different

points in time. It is the nodal Ministry for overall policy, planning and coordination of programmes for development of STs. To this end, this Ministry has undertaken activities that follow from the subjects allocated under the Government of India (Allocation of Business) Rules, 1961.

Website : www.tribal.nic.in

Scheduled Areas and Tribal Areas

Scheduled Tribes live in contiguous areas unlike other communities. It is, therefore, much simpler to have an area approach for development activities and also regulatory provisions to protect their interests. In order to protect the interests of scheduled tribes with regard to land alienation and other social factors, provisions of the Fifth Schedule and Sixth Schedule have been enshrined in the Constitution.

The Fifth Schedule under Article 244 (1) of Constitution defines "Scheduled Areas" as such areas as the President may by Order declare to be Scheduled Areas after consultation with the Governor of the state. The Sixth Schedule under Article 244 (2) of the Constitution relates to those areas in the states of Assam, Meghalaya, Tripura and Mizoram which are declared as "Tribal Areas" and provides for district councils and/or regional councils for such areas. These Councils have been conferred with wide-ranging legislative, judicial and executive powers. The criteria for declaring any area as a "Scheduled Area" under the Fifth Schedule are: (a) preponderance of tribal population; (b) compactness and reasonable size of the area; (c) a viable administrative entity such as a district, block or taluk; and (d) economic backwardness of the area as compared to neighbouring areas. The specification of "Scheduled Areas" in relation to a state is done by a notified order of the President, after consultation with the state governments concerned. The same applies for altering, increasing, decreasing, incorporating new areas, or rescinding any orders relating to "Scheduled Areas".

The advantages of Scheduled Areas are that: the Governor of a state, which has Scheduled Areas, is empowered to make regulations in respect of the following: (i) prohibit or restrict transfer of land from tribal people; (ii) regulate the business of moneylending to the members of scheduled tribes. In making any such regulation, (a) the Governor may repeal or amend any Act of Parliament or of the Legislature of the state which is applicable to the area in question; (b) the Governor may through

public notification direct that any particular Act of Parliament or of the legislature of the state, shall not apply to a Scheduled Area or any part thereof in the state or shall apply to such area subject to such exceptions and modifications as he may specify; (c) the Governor of a state having Scheduled Areas therein, shall annually, or whenever so required by the President of India, make a report to the President regarding the administration of the Scheduled Areas in that state and the executive power of the Union shall extend to the giving of directions to the state as to the administration of the said area; (d) Tribes Advisory Council (TAC) shall be established in states having Scheduled Areas. The role of TAC is to advise the state government on matters pertaining to the welfare and advancement of the scheduled tribes in the state as may be referred to it by the Governor. The TAC will consist of not more than 20 members of whom about 3/4 are to be from ST-MLAs. The TAC may also be established in any state having scheduled tribes but not Scheduled Areas on the direction of the President of India; and (e) the Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA), vide which the provisions of Panchayats, contained in Part IX of the Constitution, were extended to Scheduled Areas, also contain special provisions for the benefit of scheduled tribes. The Sixth Schedule under Article 244 of the Constitution identifies autonomous districts in the tribal areas in Assam, Meghalaya, Tripura and Mizoram. It also makes provisions for recognition of autonomous regions within these autonomous districts. These have been specified in Parts I, II, II A and III of the table appended to paragraph 20 of the Sixth Schedule. In other words, areas where provisions of Sixth Schedule are applicable are known as Tribal Areas. The state-wise details of Tribal Areas are as:

Part-I Assam: 1. The North Cachar Hills District; 2. The Karbi-Anglong District; and 3. The Bodo Land Territorial Area Districts; Part II Meghalaya: 1. Khasi Hills District; 2. Jaintia Hills District; and 3. The Garo Hills District; Part II Tripura: Tripura Tribal Areas District; and Part III Mizoram: 1. The Chakma District 2. The Mara District; and 3. The Lai District.

The district or regional councils are empowered to make rules with the approval of the Governor with regard to matters like establishment, construction or management of primary schools, dispensaries, markets, cattle ponds, ferries, fisheries, roads, road transport and waterways in the

district. The Autonomous Councils of the North Cachar Hills and Karbi Anglong have been granted additional powers to make laws with respect to other matters like secondary education, agriculture, social security and social insurance, public health and sanitation, minor irrigation, etc., The councils have also been conferred powers under the Civil Procedure Code and Criminal Procedure Code for trial of certain suits and offences, as also the powers of a revenue authority for their area for collection of revenue and taxes and other powers for the regulation and management of natural resources.

Procedure for Declaration as ST

The term scheduled tribes is defined in the Constitution of India under Article 366(25) as such tribes or tribal communities or parts of groups within such tribes or tribal communities as are deemed under Article 342 to be scheduled tribes. Article 342 prescribes the procedure to be followed in the matter of specification of scheduled tribes. In terms of Article 342(1), the President may, with respect to any state or union territory, and where it is a state, after consultation with the Governor thereof, notify tribes or tribal communities or parts thereof as scheduled tribes. This confers on the tribe or part of it a constitutional status invoking the safeguards provided for in the Constitution, to these communities, in their respective states/UTs. Thus, in terms of Article 342(1), only those communities who have been declared as such by the President through an initial public notification will be considered as scheduled tribes. Any further amendment in the list is to be done through an Act of Parliament (Article 342(2)). Parliament may, by law, include in or exclude from the list of scheduled tribes, any tribe or tribal community or parts thereof. The list of scheduled tribes is state-specific. In other words, a community declared as scheduled tribe in one state need not be so in another.

Scheduling and De-Scheduling of Tribes

Thus, the first specification of scheduled tribes in relation to a particular state/ union territory is by a notified order of the President, after consultation with the state governments concerned. The criteria generally adopted for specification of a community as a scheduled tribe are: (a) indications of primitive traits; (b) distinctive culture; (c) shyness of contact with the community at large; and (d) geographical isolation,

i.e., backwardness.These are not spelt out in the Constitution but have become well established. They take into account the definitions in the 1931 Census, the reports of the first Backward Classes Commission (Kalelkar Committee), 1955, the Advisory Committee on Revision of SC/ ST lists (Lokur Committee), 1965 and the Joint Committee of Parliament on the Scheduled Castes and Scheduled Tribes Orders (Amendment) Bill, 1967 (Chanda Committee), 1969. There are over 700 tribes (with many of them overlapping in more than one state) as notified under Article 342 of the Constitution of India, spread over different states and union territories of the country. It is worth noting that no community has been specified as a scheduled tribe in relation to the states of Haryana and Punjab and the union territories of Chandigarh, Delhi and Puducherry.

Ascertaining ST Status

Where a person claims to belong to a scheduled tribe by birth, it should be verified: (a) that the person and his parents actually belong to the community claimed; (b) that the community is included in the Presidential Order specifying the scheduled tribes in relation to the concerned state; (c) that the person belongs to that state and the area within that state in respect of which the community has been scheduled; (d) he may profess any religion; (e) that he or his parents/ grandparents, etc., should be permanent resident of the state/UT on the date of notification of the Presidential Order applicable in his case; (f) a person who is temporarily away from his permanent place of residence at the time of the notification of the Presidential Order-applicable in his case, say for example to earn a living or seek education, etc., can also be regarded as a scheduled tribe, if his tribe has been specified in that order in relation to his home state/union territory; (g) but he cannot be treated as such in relation to the place of his temporary residence notwithstanding the fact that the name of his tribe has been scheduled in respect of that state where he is temporarily settled, in any Presidential Order; and (h) in the case of persons born after the date of notification of the relevant Presidential Order, the place of residence for the purpose of acquiring ST status, is the place of permanent abode of their parents at the time of the notification of the Presidential Order under which they claim to belong to such a tribe. This does not apply to the STs of the Lakshadweep Islands for whom there is a requirement of being born in the union territories in order to be eligible for ST status.

The guiding principle is that no person who is not a scheduled tribe by birth will be deemed to be a member of scheduled tribe merely because he or she has married a person belonging to a scheduled tribe. Similarly, a person who is a member of a scheduled tribe will continue to be a member of that scheduled tribe, even after his or her marriage with a person who does not belong to a scheduled tribe. The candidates belonging to scheduled tribes may get scheduled tribe certificates, in the prescribed form, from any one of the following authorities: (i) District Magistrate/Additional District Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/Deputy Collector/1 st Class Stipendiary Magistrate/City Magistrate/Sub Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner [not below the rank of 1st Class Stipendiary Magistrate]; (ii) Chief Presidency Magistrate/ Additional Chief Presidency Magistrate/Presidency Magistrate; (iii) Revenue Officers not below the rank of Tehsildar; (iv) Sub-Divisional Officer of the Area where the candidate and/or his family normally resides; and (v) Administrator/ Secretary to the Administrator/Development Officer (Lakshadweep Islands).

Action is to be taken under the relevant provisions of the Indian Penal Code if any official is found to have issued a Scheduled Tribe certificate carelessly and without proper verification. This will be in addition to other action to which they are liable under the appropriate disciplinary rules applicable to them.

Scheduled Tribe claims on Migration

Migrants from other states/union territories persons belonging to a scheduled tribe who have migrated from one state to another for the purpose of employment, education, etc., experience great difficulty in obtaining ST certificates from the state from which they have migrated. In order to remove this difficulty, it has been decided that the prescribed authority of a state government/union territory administration may issue a scheduled tribe certificate to a person who migrated from another state, on the production of the genuine certificate issued to his father/mother by the prescribed authority of the state of the father/mother's origin except where the prescribed authority feels that a detailed enquiry is necessary through the state of origin before issue of the certificate. The certificate

will be issued irrespective of whether the tribe in question is scheduled or notin relation to the state/union territory to which the person has migrated to.

National Commission for Scheduled Tribes

National Commission for Scheduled Tribes (NCST) was set up with effect from February 19, 2004, by amending Article 338 and inserting a new Article 338A in the Constitution, through the Constitution (Eighty-ninth Amendment) Act, 2003. The Chairman and the Vice-Chairman of the Commission have been conferred the rank of Union Cabinet Minister and Minister of State respectively, while the members of the Commission have been given the rank of a Secretary to the Government of India. The main duties of the Commission are to investigate and monitor all matters relating to the safeguards provided for the scheduled tribes and to evaluate the working of such safeguards; and to inquire into specific complaints with respect to the deprivation of rights and safeguards of the scheduled tribes. The Commission is vested with all the powers of a civil court trying a suit while investigating any matter or inquiring into any complaint relating to deprivation of rights and safeguards of the scheduled tribes.

Tribal Sub Plan

The present Tribal Sub Plan (TSP) strategy was initially developed by an Expert Committee set up by the Ministry of Education and Social Welfare in 1972 for rapid socio-economic development of tribal people and was adopted for the first time in the Fifth Five Year Plan. The TSP strategy, with some modifications, continues till this day and the salient features with respect to TSP for states, are: the funds provided under the Tribal Sub Plan of the state have to be at least equal in proportion to the ST population of each state or UT; tribals and tribal areas of a state or union territories are given benefits under the TSP, in addition to what percolates from the overall Plan of a state/UT; the Sub-Plan should: (a) identify the problems and needs of tribal people and critical gaps in their development; (b) identify all available resources for TSP; (c) prepare a broad policy framework for development; (d) define a suitable administrative strategy for its implementation; and (e) specify the mechanism for monitoring and evaluation.

The Ministry has issued revised guidelines for inter-state allocation of funds and implementation of programmes/activities under proviso to Article 275(1) of the Constitution and under special central assistance to Tribal Sub Plan (SCA to TSP) in 2016. These guidelines provide focused approach on sectoral allocation and revised inter-state allocation factoring population, area and outcome-based performance as parameters. Further, inter-district allocation is also clearly spelt out. Major ST communities are also given priority. Conjunctural use with dovetailing of financial resources from ongoing activities of line department is resorted to ensure larger spatial and higher demographic coverage.

National Scheduled Tribes Finance and Development Corporation

With a view to pay a focused attention and accelerate the pace of economic development of scheduled tribes, the erstwhile National Scheduled Castes and Scheduled Tribes Financial Development Corporation was bifurcated and National Scheduled Tribes Finance and Development Corporation (NSTFDC) was set up in 2001 under the Ministry of Tribal Affairs. The NSTFDC has been granted license under Section 25 of the Companies Act (A not for profit Company). In order to achieve the mandate set for the NSTFDC (for undertaking self-employment ventures/activities), financial assistance is extended by NSTFDC to the scheduled tribes, who are having annual family income up to double the poverty line. NSTFDC also provides financial assistance as grant for skill and entrepreneurial development of the target group. The financial assistance is channelised through government-owned agencies nominated by the respective ministries/state governments and union territory administrations. NSTFDC also provides financial assistance for procurement and marketing minor forest produce so as to avoid the distress sale of produce/products by the scheduled tribes.

Eligibility Criteria

The beneficiary(ies) should belong to ST community and annual family income of the beneficiary(ies) should not exceed double the poverty line (DPL) income limit (presently DPL is ₹ 39,500 per annum for the rural areas and ₹ 54,500 per annum for the urban areas). In the case of Self Help Groups (SHGs), all the members of the SHG should belong to the ST community having annual family income up to Double

the Poverty Line (DPL). Similarly, for a cooperative society, loan is extended to the eligible STs through cooperative society having minimum 80 per cent or more STs as members.

Term loan is provided for income generating activities. Marketing support assistance is provided for financial support for meeting the working capital requirement of the central/state government owned agencies and national level federations for undertaking procurement and/or marketing of minor forest produce/ agricultural produce collected/grown by the STs and/or related product/services. Marketing support assistance extended to the beneficiaries through the SCAs, the interest is at par with rates of interest for long term loan and the assistance is extended to the central/ state/UT owned organisations, national level federations directly involved in procurement, the interest rate is 7 per cent per annum. Assistance by way of grant is also given.

Special Schemes

Adivasi Mahila Sashaktikaran Yojana (AMSY) is an exclusive scheme for the economic development of ST women, at a highly concessional rate of interest. Under it NSTFDC provides term loan for scheme(s)/ project(s) costing up to ₹ 50,000 per individual unit/profit centre. Financial assistance up to 99 per cent of the cost of the scheme(s)/project(s) is provided by the NSTFDC.

Micro-credit scheme is meant to provide financial assistance for undertaking small self-employment ventures/activities by the eligible STs through existing profit-making SHGs. SCAs shall provide eligible amount of subsidy or margin money as per their scheme(s) for the target group and remaining amount may be provided as term loan by NSTFDC.

Tribal Cooperative Marketing Development Federation

The Tribal Cooperative Marketing Development Federation of India Limited (TRIFED), was set up in 1987 as a national level apex body under the Multi State Cooperative Societies Act, 1984 (MSCS Act, 1984). After the enactment of the Multi-State Cooperative Societies Act, 2002 (MSCS Act, 2002) TRIFED is deemed to be registered under the latter Act and is also listed in the Second Schedule to the Act as a National Cooperative Society.

The bye-laws of TRIFED were revised in April 2003, in tune with the new Multi State Cooperative Societies Act, 2002, read with the Multi State Cooperative Societies Rules, 2002. Under its revised mandate, TRIFED has stopped bulk procurement in Minor Forest Produce (MFP) and Surplus Agricultural Produce (SAP) from tribals. TRIFED now functions as a 'market developer' for tribal products and as 'service provider' to its member federations.

Website : www.trifed.tribal.gov.in

Forest Rights of STs

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, seeks to recognise and vest the forest rights and occupation in forest land in forest dwelling scheduled tribes and other traditional forest dwellers who have been residing in such forests for generations but, whose rights on ancestral lands and their habitat were not adequately recognised in the consolidation of state forests during the colonial period as well as in independent India resulting in historical injustice to them. The Act has been notified for operation from 2007.

Rules, for implementing the provisions of the Act, were notified in 2008 and they envisage the constitution of various committees under the Act, viz., the sub divisional level committee, district level committee and the state level monitoring committee, by the state governments. All the states have been requested to nominate the nodal officer for implementing the provisions of the Act. The state governments were also requested to take necessary steps to ensure that awareness is created about the objectives, provisions and procedures of the Act and the Rules through various measures including awareness programmes and printed material such as posters in the regional languages; ensure the translation and publication of the Act and the Rules in all the regional languages and arrange to distribute to all gram sabhas, forest right committees and all departments of the government including panchayati raj, rural development, tribal and social welfare and forest departments; undertake the orientation of officials, civilian representative and non-governmental organisations in the state, who can then be called upon to assist as resource persons in the awareness programmes; and sensitise the sub-

divisional and district level committees on the objectives, provisions and procedures of the Act and the Rules.

As per the Act, the responsibility for recognition and vesting of forest rights and distribution of land rights rests with the state government. All the state governments have been directed that the entire process of vesting of forest rights as per the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, should be completed at the earliest. Web-based MIS for online monitoring of the implementation of the Act has been made operational from 2008 for testing purposes on website http:// www.tribal.gov.in.

Vanbandhu Kalyan Yojana

The central government launched an approach, namely, Vanbandhu Kalyan Yojana (VKY) with a view to translate the available resource into overall development of tribal population with an outcome-based orientation. The VKY has been adopted as a strategic process. It aims at creating enabling environment for need-based and outcome-oriented holistic development of tribal people. This process envisages to ensure that all the intended benefits of goods and services under various programmes/schemes of central as well as state governments actually reach the target groups by convergence of resources through appropriate institutional mechanism.

Umbrella Scheme for Education of ST Children

The Ministry is re-engineering its educational schemes with the objective of providing adequate educational infrastructure for STs and incentive for education for ST children through scholarships. This is intended to be achieved through convergence of schemes of line ministries along with simplification of process for availing scholarships and also through technological aids in improving learning activities. As needs vary from state to state, the proposed new scheme is expected to give flexibility to each state/UT. In the proposed Umbrella Scheme, the following schemes have been merged: (a) establishing and strengthening of ashram schools; (b) establishing and strengthening of hostels; (c) vocational training in tribal areas; and (d) pre-matric and post-matric scholarship.

Overseas Scholarships

The Scheme of National Overseas Scholarships (NOS) for ST students has been revised. The Scheme is providing scholarship to students selected for pursuing higher studies abroad for postgraduation, Ph.D. and post-doctoral research programmes. It has been revised to make it more beneficial for ST students.

To expand the scope of field of study, the number of awards has been increased from existing 15 to 20. In order to make the scheme more inclusive, out of total 20 awards, 3 have been earmarked for Particularly Vulnerable Tribal Groups (PVTGs) and 30 per cent awards for girl candidates. Now with the inclusion of more subjects into it and reorganising field of study by grouping various subjects under broad-based fields, more ST students would be benefitted as the number of subjects has increased from 35 to 52. Earlier, the eligibility criteria was 60 per cent marks, now it has been reduced to 55 per cent so as to enable a larger number of ST students to become eligible to apply for the scholarhips. The maximum income celling has been increased to ₹ 6 lakhs per annum. However, all other parameters being same, preference is given to students with lower income. Similarly, financial assistance, equipment allowance and includental journey expenses have been increased to 10 per cent keeping in view the inflation rates.

Welfare of Other Backward Classes

The Second Backward Classes Commission (commonly known as Mandal Commission), constituted under Article 340, submitted its report in 1980. In the light of this report, the Government of India provided 27 per cent reservation in central government posts for persons belonging to the socially and economically backward classes (also referred to as "Other Backward Classes" or OBCs). The government in 1993 reserved 27 per cent of vacancies in civil posts and services under the central government, to be filled through direct recruitment in favour of the Other Backward Classes (OBCs). With the amendment of Article 15 of the Constitution in 2006 and the enactment of the Central Educational Institutions (Reservation in Admissions) Act in 2007, listing of other backward classes has become relevant for admission in central educational institutions also. Under this Act, OBC students are entitled to 27 per cent reservation in central educational institutions in a phased

manner, over a period of three years commencing from the academic session 2008-09. The National Commission for Backward Classes (NCBC) was set up in 1993 as per the provision of the National Commission for Backward Classes Act, 1993. The Constitution (One Hundred and Second Amendment) Act passed in 2018 gave constitutional status to the Commission.

Website: www.ncbc.nic.in

Pre-Matric Scholarship for OBCs

In this scheme, the expenditure is shared between centre and state in 50:50 ratio. The aim of this scheme is to motivate children of OBCs studying at pre-matric stage. The income ceiling for eligibility should not exceed ₹ 2,50,500 per annum.

Post-Matric Scholarship for OBCs

The objective of the Scheme is to provide financial assistance to the OBC students studying at post-matriculation or post-secondary stage to enable them to complete their education. The income ceiling of parents/guardians for eligibility is ₹ 1.00 lakh per annum.

Construction of Hostels for OBC Boys and Girls

This scheme aims at providing hostel facilities to students belonging to socially and educationally backward classes, especially from rural areas, to enable them to pursue secondary and higher education. The funding pattern as per the guidelines are: (i) the cost of construction for boys, hostels is shared between the centre and the state in 60:40 ratio. For the girls, hostels the ratio is 90:10; (ii) in case of union territories, the central assistance is 100 per cent and for north eastern states, it is 90 per cent; (iii) for central universities/institutes, the central government share is 90 per cent and the remaining 10 per cent is borne by the central university institute for both boys and girls; (iv) the private universities/ institutions and NGOs can avail central assistance up to 45 per cent of the cost. The remaining 55 per cent shall be borne by state and university/institution/ NGO in 45:10 ratio; (v) the amount of grant will be released in 3 installments in 50:45:5 ratio, of which 5 per cent grant will be released after completion of the work and occupation of the rooms by the OBC boys and girls. The construction work of the hostel has to be completed within 18 months from award of work order or two

years from the release of central assistance, whichever is earlier. In no case the time will be extended beyond 2 years. Any cost escalation due to delay in project will be borne by the state/institute.

National Fellowship for OBC Students

Assistance for Skill Development

The aim of the Scheme is to involve the voluntary sector to improve educational and socio-economic conditions of the target group, i.e., Other Backward Classes (OBCs)/De-notified, Nomadic and Semi-Nomadic Tribes (DNTs)/ Economically Backward Classes (EBCs) with a view to upgrade skill to enable them to start income generating activities on their own or get gainfully employed in some sector or the other.

It aims at providing financial assistance to the OBC students in obtaining quality higher education leading to degrees such as M.Phil, and Ph.D. in universities, research institutions and scientific institutions. The Scheme is designed to provide a total number of 300 junior research fellowships per year from 201415 onwards and 300 senior research fellowships from 2016-17 to Other Backward Class (OBC) students. The UGC is the nodal agency for implementing it and notifies the scheme through advertisements in the media at a suitable date. The Scheme covers all universities/institutions recognised by the University Grants Commission. The rate of fellowship for JRF level is ₹ 25,000 per month and for SRF level, it is ₹ 28,000 per month.

Dr. Ambedkar Scheme of Interest Subsidy on Educational Loans

The objective of the Scheme is to award interest subsidy to meritorious students belonging to the Other Backward Classes (OBCs) and Economically Backward Classes (EBCs) so as to provide them better opportunities for higher education abroad and enhance their employability. For the eligibility of OBC candidates, total income from all sources of the employed candidates, or his/her parents/guardians in case of unemployed candidate, shall not exceed present creamy layer criteria. For the eligibility of EBC candidates, total income from all sources of the employed candidate or his/her parents/guardians in case of unemployed candidate, shall not exceed ₹ 2.50 lakh per annum. Out of the total outlay for a year, a minimum of 50 per cent amount is earmarked for interest subsidy to the girl students.

Post-Matric Scholarship to the EBC Students

This is a centrally sponsored scheme being implemented through the state governments and UT administrations. The objective of the Scheme is to provide financial assistance to the EBC students studying at post-matriculation or post-secondary stage. The income ceiling of parents/guardians for eligibility is ₹ 1 lakh per annum (including self income, if employed).

Dr. Ambedkar Scholarship for DNTs

This is a centrally sponsored Scheme launched in 2014-15 for the welfare of those DNT students who are not covered under SC, ST or OBC. The income ceiling for eligibility is ₹ 2 lakh per annum. It is implemented through state governments/UT administrations. The expenditure is shared between centre and state in 75:25 ratio.

Nanaji Deshmukh Scheme of Construction of Hostels

This is a centrally sponsored Scheme launched in 2014-15 being implemented through state governments/UT administrations/central universities. The Scheme aims at providing hostel facilities to those DNT students who are not covered under SC, ST or OBC, to enable them to pursue secondary and higher education. The income ceiling for eligibility is ? 2 lakh per annum. The central government will provide a maximum of 500 seats per annum throughout the country. The cost norm under the scheme is ₹ 3 lakh per seat for the hostel (which is shared between centre and state in 75:25 ratio) and ₹ 5,000 per seat for furniture. The construction work of the hostel has to be completed within eighteen months from award of work order or two years from the release of central assistance, whichever is earlier. In no case will the time be extended beyond 2 years. Any cost escalation due to delay in project will be borne by the state/institute.

National Backward Classes Finance and Development Corporation

National Backward Classes Finance and Development Corporation (NBCFDC) was incorporated in 1992 as a not for profit company with an objective to promote economic and developmental activities for the benefit of backward classes and to assist the poorer sections of these classes in skill development and self employment ventures. It is a Government of India Undertaking under the aegis of Ministry of Social

Justice and Empowerment. The Corporation extends various types of loans to the target group, i.e., members of backward classes. The members of backward classes having annual family income of less than double the poverty line (i.e. ₹ 98,000 in rural areas and ₹ 1,20,000 in urban areas) are eligible to obtain loan under NBCFDC schemes through SCAs. Besides other developmental activities, the Corporation is promoting, marketing facilities for the artisans of the target group by providing opportunities to participate in the country's leading fairs like India International Trade Fair, Dilli Haat, Surajkund Crafts Mela as well as in the exhibitions/fairs organised in their respective states.

NBCFDC helps traditional artisans by way of providing them platform to exhibit their products in these exhibitions to establish marketing linkages. The stalls are allotted free-of-cost to all the beneficiary artisans. NBCFDC also motivates the State Channelising Agencies (SCAs) to organise or participate in exhibitions to showcase the schemes of the Corporation and also to exhibit the diverse products and services for which NBCFDC has provided financial assistance to the members of backward classes in different parts of the country through SCAs.

Social Defence

In the areas of Social Defence, the Ministry is committed towards welfare of older persons and rehabilitation of drug addicts. The programmes for the targeted groups are given next.

National Policy for Older Persons

The existing National Policy on Older Persons (NPOP) was announced in 1999 to reaffirm the commitment to ensure the well-being of the older persons. The Policy envisaged state support to ensure financial and food security, healthcare, shelter and other needs of older persons, equitable share in development, protection against abuse and exploitation, and availability of services to improve the quality of their lives. The primary objectives were: to encourage individuals to make provision for their own as well as their spouse's old age; to encourage families to take care of their older family members; to enable and support voluntary and non-governmental organisations to supplement the care provided by the family; to provide adequate healthcare facility to the elderly; to promote

research and training facilities to train geriatric care-givers and organisers of services for the elderly, etc.

National Council for Older Persons

The government has reconstituted National Council for Older Persons (NCOP) to advise and aid the government on developing policies and programmes for older persons. It provides feedback to the government on the implementation of the national policy on older persons and the specific initiatives for older persons. The NCOP is the highest body to advise and coordinate with the government in the formulation and implementation of policy and programmes for the welfare of the aged. Under Integrated Programme for Older Persons, financial assistance up to 90 per cent of the project cost is provided to NGOs for establishing and maintaining old age homes, day care centres, mobile medicare units and to provide non-institutional services to older persons. In order to have a definite structure as well as regional representation, the Council has been reconstituted and renamed as National Council of Senior Citizens (NCSrC) in 2012.

Drugs and Psychotropic Substances

The Narcotic Drugs and Psychotropic Substances Act, 1985, was enacted, inter alia, to curb drug abuse. Section 71 of the Act provides that the government may, in its discretion, establish as many centres as it thinks fit for identification, treatment, education, after-care, rehabilitation, social reintegration of addicts and for supply, subject to such conditions and in such manner as may be prescribed by the concerned government of any narcotic drugs and psychotropic substances to the addicts registered with the government and to others where such supply is a medical necessity. Accordingly the Ministry of Social Justice and Empowerment has been supporting Integrated Rehabilitation Centre for Addicts (IRCAs) under the Scheme of Prevention of Alcoholism and Substance (Drugs) Abuse being run by voluntary organisations.

Narcotic Drugs and Psychotropic Substances Policy

Ministry of Finance in consultation with all stakeholders including the Department of Social Justice and Empowerment has brought the Narcotic Drugs and Psychotropic Substances Policy (NDPS Policy) which aims to: (a) spell out the policy towards narcotic drugs and psychotropic

substances; (b) serve as a guide to various ministries and organisations in the government and to the state governments as well as international organisations, NGOs, etc.; and (c) re-assert India's commitment to combat the drug menace in a holistic manner.

Minorities

The Ministry of Minority Affairs was established in 2006. It has been mandated for formulation of policies, schemes and programmes for welfare and socio-economic development of 6 notified minority communities namely, Muslims, Christians, Sikhs, Buddhists, Parsis and Jains, which constitute more than 19 per cent of India's population. From October 2016, the mandate of the Ministry has been expanded to manage Haj Pilgrimage as well.

Websites: www.minorityaffairs.gov.in www.ncm.nic.in

15-Point Programme for Minorities

The Prime Minister's 15-Point programme for the Welfare of Minorities was announced in 2006. The objectives of the programme are: (a) enhancing opportunities for education; (b) ensuring an equitable share for minorities in economic activities and employment, through existing and new schemes, enhanced credit support for self-employment and recruitment to state and central government jobs; (c) improving the conditions of living of minorities by ensuring an appropriate share for them in infrastructure development schemes; and (d) prevention and control of communal disharmony and violence. An important aim of the new programme is to ensure that the benefits of various government schemes for the underprivileged reach the disadvantaged sections of the minority communities. In order to ensure that the benefits of these schemes flow equitably to the minorities, the new programme envisages location of a certain proportion of development projects in minority concentration areas. It also provides that, wherever possible, 15 per cent of physical targets and financial outlays under various schemes should be earmarked for the target groups.

Scholarship Schemes for Minority Students

This Ministry is implementing three scholarship schemes for the educational empowerment ot students belonging to the notified minority

communities: (i) pre-matric scholarship; (ii) post-matric scholarship; and (iii) merit-cum-means based scholarship.

To improve transparency in scholarship schemes, a new and revamped version of National Scholarship Portal was launched for various ministries of the Central government including Ministry of Minority Affairs for extending scholarships during 2016-17. All the above three scholarship schemes of this Ministry are on the NSP 2.0 portal. The scholarships are transferred in the bank accounts of students in Direct Benefit Transfer (DBT) mode. Wherever Aadhaar numbers are available, the bank accounts of students are being limited and transferred to such accounts.

(i) Pre-Matric Scholarship Scheme: The pre-matric scholarship scheme was approved in 2008. It is a central sector scheme with 100 per cent central funding. The students who secure 50 per cent marks in the previous examination and whose parents'/guardians' annual income does not exceed ₹ 1 lakh, are eligible. Under the Scheme, 30 lakh fresh scholarships are proposed to be awarded every year in addition to the renewals. About 30 per cent of scholarships have been earmarked for girl students. The scholarship of ₹ 1000 to ₹ 10,700 is awarded to every selected student. An outlay of ₹ 5000 crore has been provided in the Twelfth Five Year Plan to award 414.50 lakh scholarships fresh and renewals during the Plan period (2012-1 7).

(ii) Post-Matric Scholarship Scheme: The scheme of post-matric scholarship was launched in 2007. It is a central sector scheme awarded for studies in India in a government higher secondary school/college including residential government higher secondary school/college and eligible private institutes selected and notified in a transparent manner by the state government/union territory administration concerned. Students who secure 50 per cent marks in the previous year's final examination and whose parents'/guardians' annual income does not exceed ₹ 2 lakh are eligible for award of scholarship. Under the Scheme, 5 lakh fresh scholarships are proposed to be awarded every year in addition to the renewals. About 30 per cent of scholarships have been earmarked for girl students. In case sufficient numbers of girl students are not available then eligible boy students are given these scholarships.

(iii) Merit-cum-Means based Scholarship: The merit-cum-means based scholarship scheme is a central sector scheme launched in 2007 wherein 100 per cent scholarship expenditure is borne by the central government. Scholarships are awarded for pursuing professional and technical courses, at undergraduate and postgraduate levels, in institutions recognised by appropriate authority. Under the scheme, 60,000 fresh scholarships are proposed to be awarded every year in addition to the renewals. About 30 per cent of these scholarships are earmarked for girl students, which may be utilised by eligible boy students, if adequate numbers of eligible girl students are not available. About 85 institutes for professional and technical courses have been listed in the scheme. Eligible students from the minority communities admitted to these institutions are reimbursed full course fee. A course fee of ₹ 20,000 per annum is reimbursed to students studying in other institutions. Besides, a student is also eligible for maintenance allowance of up to ₹ 10,000 p.a. To be eligible, a student should have secured admission in any technical or professional institution, recognised by an appropriate authority. In case of students admitted without a competitive examination, they should have secured not less than 50 per cent marks. The annual income of the family from all sources should not exceed ₹ 2.50 lakh.

Maulana Azad National Fellowship

The Maulana Azad National Fellowship (MANF) scheme for minority students was launched in 2009 as a Central Sector Scheme (CSS). It is implemented through University Grants Commission (UGC) and cent per cent central assistance is provided under the scheme. The objective of the scheme is to provide five year fellowships in the form of financial assistance to students from minority communities, notified by the central government to pursue higher studies such as M.Phil, and Ph.D. courses. The fellowship covers all universities/institutions recognised by the UGC. The Fellowship is awarded to research scholars pursuing regular and full-time M.Phil, and Ph.D. courses. In order to qualify for the award of JRF/SRF, the UGC norms would be applicable at pre-M.Phil. and pre-Ph.D. stage, respectively, including the minimum score of 55 per cent at postgraduate levels. About 30 per cent of the fellowships have been earmarked for female candidates. In case there is shortage of female

candidates, the fellowship can be passed on to male candidates of the same minority community.

Naya Savera - Free Coaching and Allied Scheme

The Free Coaching and Allied Scheme for the candidates belonging to miniority communities was launched in 2007 by this Ministry.

Nai Udaan

The objective of the Scheme is to provide financial support to the minority candidates clearing Preliminary Exams conducted by Union Public Service Commission, Staff Selection Commission and State Public Service Commissions to adquately equip them to compete for appointment to Civil Services in the Union and the state governments and to increase the representation of the minority in the civil services by giving direct financial support to candidates.

Padho Pardes

The objective of the Scheme is to award interest subsidy to meritorious students belonging to economically weaker sections of notified minority communities so as to provide them better opportunities for higher education abroad and enhance their employability. The interest subsidy under the Scheme shall be available to the eligible students only once, either for Masters or Ph.D.

Nai Roshni

This Ministry implements an exclusive scheme 'Nai Roshni' for leadership development of minority women with an aim to empower and instill confidence in them by providing knowledge, tools and techniques for interacting with government systems, banks and intermediaries at all levels. It is implemented through empanelled non-governmental organisations.

National Commission for Minorities

The Minorities Commission which was set up in 1978 became a statutory body with the enactment of the National Commission for Minorities Act, 1992, after which it was renamed as the National Commission for Minorities. The first statutory National Commission was set up in 1993. The NCM Act, 1992, was amended in 1995 which provided for a Vice Chairperson in the Commission. With the 1995 amendment, the Commission's composition was expanded to 7 members

(including a Chairperson and a Vice Chairperson). The provision under Section 3(2) of the Act stipulates that five members including the Chairpersons shall be from amongst the minority communities.

Website: www.ncm.nic.in

State Commission for Minorities

Thirteen state governments/UT administrations namely, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Government of NCT of Delhi, Jharkhand, Karnataka, Maharashtra, Madhya Pradesh, Rajasthan, Uttar Pradesh, Tamil Nadu and West Bengal have set up statutory commissions for minorities. Manipur and Uttarakhand have set up non-statutory commissions.

National Commission for Religious and Linguistic Minorities

Commissioner for Linguistic Minorities

The Office of the Commissioner for Linguistic Minorities (CLM) was established in 1957 in pursuance of the provision of Article 350-B of the Constitution which envisages investigation by CLM of all matters relating to the safeguards provided for the linguistic minorities in the country under the Constitution and reporting to the President upon these matters at such intervals as the President may direct. The President may want that all such reports be laid before each House of the Parliament and sent to the government administration of states/UTs concerned. The CLM organisation has its headquarters at Delhi with three zonal offices at Belgaum, Chennai and Kolkata. Ths CLM interacts with states/UTs on all the matters pertaining to the issues concerning implementation of the Constitutional and nationally agreed safeguards provided to lingustic minoritiers.

Constitutional Safeguards for Linguistic Minorities

Under the Constitution of India, certain safeguards have been granted to the religious and linguistic minorities. Article 29 and 30 seek to protect the interests of minorities and recognise their right to conserve their distinct language, script or culture and to establish and administer educational institutions of their choice. Article 347 makes provision for Presidential direction for official recognition of any language spoken by

a substantial proportion to the populations of a state or any part thereof for such purpose as the President may specify. Article 350 gives the right to submit representation for redressal of grievances to any authority of the union or a state in any of the languages used in the union/ states. Article 360A provides for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups. Article 350B provides for a Special Officer designated as Commissioner for Linguistic Minorities to investigate all matters relating to the safeguards provided for linguistic minorities under the Constitution.

Central Wakf Council

A Wakf is a permanent dedication of movable or immovable properties for purposes recognised by the Muslim Law as religious, pious or charitable. Apart from these religious aspects, the Wakfs are also instruments of social and economic upliftment. Administration of central legislation for Wakfs is the responsibility of the Ministry of Social Justice and Empowerment. For the purpose of advising the central government on matters relating to working of the state Wakf Boards and the proper administration of the Wakfs in the country, the Central Wakf Council was established as a statutory body in 1964, under Section 8A of the Wakf Act, 1954 (now read as Sub-Sec(1) of the Section 9 of Wakf Act, 1995). The present Council was reconstituted in 2005. The Union Minister in charge of Wakf is the Chairperson of the Council. The Central Wakf Council is also playing a vital role in the development of the society by way of implementing development of urban Wakf properties and educational development programmes.

Website : www.centralwakfcouncil.gov.in

Durgah Khawaja Saheb Act

It is an Act to make provision for the proper administration of Dargah and Endowment of the Dargah Khwaja Moin-ud-din Chishty (R.A.). Under this central Act, the administration, control and management of the Dargah Endowment has been vested in a representative committee known as the Dargah Committee appointed by the central government. The Dargah of Khwaja Moin-ud-din Chishti at Ajmer in Rajasthan is a Waqf of international fame. It is being administered under the Dargah Khwaja Saheb Act, 1955. With the help of the Government of India, the former Ministry of Urban Development and with the active involvement

of the government of Rajasthan through local administration, the Dargah Committee is implementing a scheme of providing lodging facilities for lakhs of pilgrims who visit the holy Dargah during the annual Urs. The facility was earlier named "Vishram Sthali" and has been renamed "Gharib Nawaz Mehmankhana". The infrastructure is meant to provide facilities/amenities to the zaireen of Dargah Khwaja Sahab.

Women and Child Development

The development of women and children is of paramount importance and sets the pace for overall development. A separate Ministry of Women and Child Development came into existence in 2006 with the prime intention of addressing gaps in state action for women and children and for promoting inter- ministerial and inter-sectoral convergence to create gender equitable and child centred legislation, policies and programmes. The Ministry has the main responsibility to advance the rights and concerns of women and children and to promote their survival, protection, development and participation in a holistic manner. The Ministry has a vision of empowered women living with dignity and contributing as equal partners in development in an environment free from violence and discrimination and well nurtured children with full opportunities for growth and development in a safe and protective environment. Its mission for children is to ensure development, care and protection through cross-cutting policies and programmes, spread awareness about their rights, facilitate access to learning, nutrition, institutional and legislative support for enabling them to grow and develop to their full potential.

Website: www.wcd.nic.in

Acts relating to Women and Children

The Ministry is in charge of the administration of the following Acts relating to women and children: (a) The Immoral Traffic (Prevention) Act, 1956 (as amended in 1986); (b) The Indecent Representation of Women (Prevention) Act; 1986 (60 of 1986); (c) The Dowry Prohibition Act, 1961 as amended in 1986; (d) The Commission of Sati (Prevention) Act, 1987 (3 of 1988); (e) The Prohibition of Child Marriage Act; 2006 (notified in January 2007); (f) Protection of Women from Domestic Violence Act, 2005; (g) National Commission for Women Act, 1990; (h)

Infant Milk Substitutes; Feeding Bottles and Infant food (Regulation of Production; Supply and Distribution) Act, 1992 (41 of 1992); (i) Commission for Protection of Child Rights Act; 2005; (j) Juvenile Justice (Care and Protection of Children) Act 2000; (k) The Protection of Children from Sexual Offences (POCSO) Act and POCSO Rules, 2012; and (I) Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal), 2012. The Juvenile Justice (Care and Protection of Children) Amendment Bill was passed in Parliament in August 2011. The Ministry's mandate primarily includes formulation of plans, policies and programmes for women and children; enactment and amendment of legislations related to them; and overall guidance and coordination of efforts of governmental and non-governmental organisations working in the field of women and child development. The Ministry's schemes and programmes play a supplementary and complementary role to the development programmes of the Ministry.

Beti Bachao Beti Padhao

Beti Bachao Beti Padhao is one the flagship programmes of the government, launched in 2015 to address the declining Child Sex Ratio (CSR) and other related issues of disempowerment of women. CSR is the number of girls against 1,000 boys in the age group of 0-6 years. It is a tri-ministerial, convergent effort of Ministries of Women and Child Development, Health and Family Welfare and Education with focus on the following: awareness and advocacy campaign; multi-sectoral action in select 161 districts (low on CSR); enabling girls' education; effective enforcement of pre-conception and pre-natal diagnostic techniques (PC&PNDT) Act.

The specific objectives of the Scheme include preventing gender-biased sex selective elimination; ensuring survival and protection of the girl child and ensuring education and participation of the girl child. The multi-sectoral action in districts lays special focus on effective implementation and monitoring of PC&PNDT Act, promotion of early registration of pregnancy, institutional deliveries and registration of births by the Ministry of Health and Family Welfare; making schools girl-friendly: enrolment of girls in schools; retention of girls in secondary schools; availability of functional toilets by the Ministry of Education; awareness generation, advocacy, community mobilisation and

training of stakeholders, local champions, rewards to institutions and frontline workers by the Ministry of Women and Child Development. It is envisaged to bring an improvement in sex ratio at birth (SRB) in the short-term while child sex ratio (CSR) with manifestation of overall development such as improved health and nutrition, gender parity in education, better sanitation, opportunities and removal of asymmetries between the genders is endeavoured in the long term. In a short span of time, the clarion call of Beti Bachao Beti Padhao is resonating across the country. This programme has been successful in establishing improvement in CSR as a national agenda. It has stirred national consciousness with the political leadership and government, both at the central and states/UTs level, owning the initiative. Several innovative interventions have been demonstrated on ground in the selected districts.

This has resulted in building around the increased issue of awareness, sensitisation and conscious declining CSR in the public domain. Encouraging results are emerging with improving trends seen in sex ratio at birth, institutional deliveries, ANC Registrations and girls enrolment in School at Secondary levels in majority of the selected districts.

Social Media Presence:

BBBP Facebook Page:

https: //www.facebook.comAVCD.BetiBachaoBetiPadhao YouTube channel on BBBP (for films! audio-video spots): www.youtube.com/user/BetiBachaoBetiPadhao

Vikaspedia:http://vikaspedia.in/social-welfare/women-and-chiId development/child-development-i/girl-child-welfare/beti-bachao-beti padhao

BBBP Mobile Application:

https:/ /apps.mgov.gov.in/descp.doappid=792

Pradhan Mantri Matru Vandana Yojana

Government announced pan-India implementation of maternity benefit programme to eligible pregnant women and lactating mothers. The programme was named Pradhan Mantri Matru Vandana Yojana (PMMVY).

It is a centrally sponsored scheme under which the grant-in-aid is PMMVY released to states/UTs in cost sharing ratio between the centre

and the states and UTs with legislature as 60:40, for north-eastern states and Himalayan states it will be 90:10 and 100 per cent for the union territories without legislature.

PMMVY envisages providing cash incentive amounting to ₹ 5,000 directly to the bank/post office account of PW and LM in DBT mode during pregnancy and lactation in response to individual fulfilling specific conditions.

Poshan Abhiyaan

Poshan Abhiyaan is a flagship programme of Ministry of Women and Child Development which ensures convergence with various programmes i.e., Anganwadi Services, Pradhan Mantri Matru Vandana Yojana (PMMVY), Scheme for Adolescent Girls (SAG) of MWCD Janani Suraksha Yojana (JSY), National Health Mission (NHM), Swachh Bharat Mission and Public Distribution System (PDS). It focuses to lay emphasis on the first 1,000 days of the child, which includes the nine months of pregnancy, six months of exclusive breastfeeding and the period from 6 months to 2 years to ensure focused interventions on addressing undermutrition, besides increasing the birth weight. It will help reduce both Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR). Additional one year of sustained intervention (till the age of 3 years) would ensure that the gains of the first 1,000 days are consolidated. Attention is also given on children in the age group of 3-6 years for their overall development through the platform of the Anganwadi Services.

Mahila Shakti Kendra

Government of India approved the Mahila Shakti Kendra (MSK) Scheme in 2017 for its implementation from 2017-18 to 2019-20 to empower rural women through community participation. The Scheme aims to provide an interface for rural women to approach the government for availing their entitlements and also empowering them through training and capacity building. The Scheme inter alia envisages giving a foothold to women empowerment schemes including BBBP scheme. MSK Scheme is being implemented with a cost sharing ratio of 60:40 between centre and states except for north-eastern and special category states where the funding ratio is 90:10.

One Stop Centres

Women who suffer violence face huge problems in getting justice as they have to register FIRs and engage lawyers to fight court cases. In many cases, the medical evidence gets destroyed due to lack of knowledge or pressure from perpetrators. As a result, very often women suffer violence but do not complain. In order to assist such women, a new initiative to establish One Stop Centres (OSC) was conceived and is being implemented across the country since April 2015. A woman who has suffered violence can get medical, police, legal and psychological counselling assistance at these centres. These also have a place for them to temporarily stay in case their condition so warrants. The OSC, popularly known by the name of Sakhi, will be integrated with 181 and other existing helplines. The first centre was inaugurated at Raipur, Chhattisgarh in 2015. So far, 138 such centres have been operational in several states/UTs, catering to the needs of the women affected by violence. Over 4,000 women have been assisted in these centres, which have come up in the last six months or so. The scheme is implemented through the state/UT government. The management committee headed by District Collector is responsible for the day-to-day operation of the OSC.

Universalisation of Women Helpline

The Scheme of Universalisation of Women Helpline is being implemented since 2015, intended to provide 24 hours emergency and non-emergency response to women affected by violence through referral (linking with appropriate authority such as police, One Stop Centre, hospital) and information about women related government schemes/programmes across the country through a single uniform number (181). Women Helpline will be integrated with One Stop Centre Scheme and women in need of redressal services will be referred here. The Scheme envisages that the states/UTs will utilise or augment their existing women helplines through a dedicated single national number. Department of Telecommunications, has allocated a short code 181 to all states/UTs. So far, women helplines have been operational in various states/UTs, i.e., Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Chandigarh (UT), Delhi, Madhya Pradesh, Gujarat, Kerala, Uttarakhand, Mizoram. Jharkhand, Bihar, Punjab, Maharashtra, Odisha, Uttar Pradesh, Meghalaya, Haryana, Nagaland, West Bengal, Sikkim and Meghalaya.

Panic Button on Mobile Phones

To provide emergency response to women in distress, MWCD had taken up the installation of physical panic button on mobile phones. Based on extensive stakeholder consultations initiated by the Ministry the 'Panic Button and Global Positioning System in Mobile Phone Handsets Rules, 2016' have been notified by the Department of Telecommunications. Under these rules, all new feature phones will have the facility of panic button configured to the numeric key 5 or 9 and all smart phones will have it configured to three times short pressing of the on-off button. Further, all new mobile phones will be required to have the facility of identifying the location through satellite based OPS. An Emergency Response Support System (ERSS) is also being set up under Nirbhaya Fund in collaboration with MHA, which will integrate all emergency numbers to 112 with state-of-the-art technology to respond to distress signals sent from panic button.

Mahila Police Volunteers

The broad mandate of Mahila Police Volunteers (MPVs) is to report to authorities/police the incidences of violence against women such as domestic violence, child marriage, dowry harassment and violence faced by women in public spaces. Haryana has become the first state to operationalise the Mahila Police Volunteers scheme. It was launched jointly by the WCD Ministry and Haryana government in 2016 for the districts of Karnal and Mahendragarh in the state.

Swadhar Greh

The Ministry is implementing the Swadhar Greh Scheme which targets the women who have been victims of unfortunate circumstances and who are in need of institutional support for rehabilitation so that they could lead their life with dignity. The Scheme envisages providing shelter, food, clothing and health as well as economic and social security for the women victims of difficult circumstances which includes widows, destitute and/or aged women. Swadhar Greh Scheme is being implemented as a sub-scheme of the Centrally Sponsored Umbrella Scheme Protection and Empowerment of Women under which funds are released through the states, with cost sharing ratio of 60:40 between the centre and the states except for the north-eastern and Himalayan States where it is 90:10 and for UTs it is 100 per cent from 2016.

Working Women Hostel Scheme

Working Women Hostel Scheme aims at providing safe and affordable accommodation to working women. These hostels have day-care facility for the children of inmates too. The Ministry provides financial support for establishing such hostels by NGOs or state governments. The cost sharing ratio amongst the central government, states/UTs (other than NE and Himalayan States) and Implementing Agencies is 60:15:25 for construction of building for working women hostel/running hostel in rented premises. For NE and Himalayan States, the ratio is 65:10:25.

Reservation for Women in Police Force

The WCD Ministry has been working along with the Ministry of Home Affairs to improve overall police responsiveness to gender sensitive cases and to bring visibility to more women and strengthen gender sensitivity in police force. An advisory has been issued to all state governments to increase representation of women in police to 33 per cent of the total strength. As a result, reservation has been extended in various states/union territories. So far, states, viz., Bihar, Gujarat, Odisha, Nagaland, Rajasthan, Jharkhand, Madhya Pradesh, Telangana and UTs namely Chandigarh, Lakhadweep and Dadra and Nagar Haveli and Daman and Diu, NCT of Delhi, Puducherry have aleady extended such reservation.

Inclusion of Acid Attack as Disability

Taking note of the long-lasting damage or disfigurement on the life of a person attacked with acid as well as constant medical attention, MWCD requested Ministry of Social Justice and Empowerment to include acid attack induced damage or disfigurement within the list of specified disabilities. The recently enacted Rights of Persons with Disabilities Act, 2016 notified in 2016, included acid attack as a kind of disability. Acid attack victims can now avail disability benefits.

Guidelines for Matrimonial Websites

In view of the increasing number of crimes committed against women on account of information shared on matrimonial websites, it was decided to look into the issue and put in place a regulatory framework in order to check this misuse. The Ministry has already carried out extensive work for the preparation of the due diligence guidelines for the matrimonial websites and prepared a concept paper detailing extent of

the problem, existing safeguards, existing legal remedies, etc., which has been circulated to stakeholders concerned.

NRI Matrimonial Disputes

Due to increase in Indian Diaspora and consequent overseas marriages, women whether residing in India or abroad, are facing issues related to desertion, domestic violence, exparte divorce and custody of children, etc. As the issues involve inter-country jurisdiction, women engaged in such cases face legal hurdles due to lack of information regarding procedures when the other party is residing abroad. To spread information MWCD has prepared Standard Operating Procedures (SoPs) for women involved in NRI matrimonial disputes. These SoPs narrate the step-wise correct legal recourse to be undertaken by women to facilitate speedy access to justice. These are also intended to serve as an effective reference manual for court and police officials across the country who are investigating such disputes or representing such women's interest in courts.

Gender Budgeting Initiatives

Gender Budgeting (GB) is a powerful tool for achieving gender mainstreaming so as to ensure that benefits of development reach women as much as men. It is not an accounting exercise alone but an ongoing process of keeping a gender perspective at various steps of budget planning, allocation, implementation, impact/outcome assessment, review and audit. To institutionalise such budgeting in the country, the setting up of Gender Budgeting Cells (GBCs) in all ministries/departments was mandated by the Ministry of Finance in 2007. The MWCD as the nodal agency for gender budgeting is undertaking several initiatives for taking it forward at the national and state levels. About 57 central ministries and departments have set up GBCs which are expected to serve as a focal point for coordinating gender budgeting initiatives, both intra and inter-ministerial. Several states and union territories have designated Gender Budgeting nodal centres.

Gender Champions

The initiative of Gender Champions is being implemented through educational institutions to sensitise young students and create awareness on laws, legislations, legal rights and life skills' education. The Gender

Champion guidelines developed by MWCD are being operationalised in collaboration with the Ministry of Education. A Training Module for Gender Champions has been developed for adoption by educational institutes.

Mandatory Mention of Widows' Name on Death Certificates

To ensure that a widow is facilitated to get all her entitlements after the death of her husband, WCD Ministry is working with the office of Registrar General of India as well as the state governments to ensure that the name of the widow is compulsorily mentioned in the death certificate of her husband.

Shelter Home for Widows

It is the largest ever such facility being established or funded by the government, the Home, which will have a capacity to house 1,000 women, is being constructed on 1.424 hectare of land at an estimated cost of ₹ 57 crore (including cost of the land) at Vrindavan. The design of the Home has been prepared in consultation with HelpAge India and is old age friendly.

Training for Women Heads of Panchayats

Although 33 per cent posts of heads of Gram Panchayats have been reserved for women, they are unable to exercise real authority for betterment of villages due to lack of training and continued dominance/interference by their husbands, etc. In order to empower these women at grassroot level, MWCD has initiated a massive programme to train over 2 lakh women heads of Panchayats. The training was started from 2016 onwards in partnership with Ministry of Rural Development. The training modules cover all aspects of village level management including basic knowledge of government schemes, social issues and their resolution, management of panchayat finances, village infrastructure, etc. This Scheme is being implemented in collaboration with Ministry of Panchayati Raj.

Extending Maternity Leave Duration

The WCD Ministry has been working to extend the maternity leave period for working women to seven months to enable them to provide exclusive breastfeeding to children for six months after child birth and complementary foods thereafter to help reduce incidence of malnutrition.

Ministry of Labour and Employment carried out suitable amendments in the Act, which are as follows: (i) enhancement of maternity leave under Maternity Benefit Act, 1961 from existing 12 weeks to 26 weeks; (ii) extension of maternity benefit to adopting mothers and commissioning mothers; and (iii) establishment of creche facility within the office/factory premises.

The Act is now called the Maternity Benefit (Amendment) Act, 201 7.

Sexual Harassment of Women at Workplace

To ensure safety and security of women at workplaces, the Ministry of Women and Child Development is working towards the effective implementation of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. In this regard, advisories and monitoring framework have been issued to state governments/central ministries/departments to ensure the effective implementation of the Sexual Harassment Act, expeditious inquiry into the complaint and to prevent further victimisation of the complainant. In addition, MWCD has also prepared and released a Handbook on the Act which provides information about the provisions of the Act in an easy-to-use and practical manner.

Village Convergence and Facilitation Service

Village Convergence and Facilitation Service (VCFS) is an initiative launched in 2015 aimed at creating awareness through community engagement. Dedicated village coordinators are selected to facilitate convergence on women's issues and work in close coordination with the gram panchayat and its subcommittees. In this manner, issues pertaining to education, health, nutrition, legal rights, safety and security of women are addressed and access to schemes/ programmes being implemented by the government such as Beti Bachao Beti Padhao, Jan Dhan Yojana, One Stop Centre, Women Helpline, etc., are provided. VCFS has been extended from 100 gender critical districts to cover 303 districts across the country.

Women of India Exhibitions/Festivals

The Initiative was started in 2014 to link women organic farmers and entrepreneurs directly to the market. Three such exhibitions/festivals have already been held in Delhi, many more such exhibitions/festivals

are being organised in locations outside Delhi. Such events are being held to provide a platform so that women entrepreneurs and farmers especially from rural India get an opportunity to exhibit and sell their products. Such exhibitions/festivals empower women through knowledge sharing and creating entrepreneurial opportunities to make societal balance through financial inclusion.

Mahila e-Haat

The Ministry of Women and Child Development launched "Mahila e-Haat", a unique direct online digital marketing platform for women entrepreneurs/SHGs/ NGOs in 2016. This can become a game changer initiative as it can become a catalyst in strengthening women entrepreneurship and financial inclusion. The USP of Mahila e-Haat is facilitating direct contact between the vendor and buyer. It is easy to access as the entire business of e-Haat can be handled through a mobile.

National Policy for Women

The Draft National Pol icy for Women, 2016, is in its last stages of finalisation. It has been revised after 15 years and is expected to guide government action on women's issues over the next 15-20 years. The policy addresses women's issues on a life-cycle continuum and encompasses a wide spectrum of issues from education, health, economic participation, decision making, violence, creation of an enabling environment, etc.

New Passport Rules

In a major move, on insistence of the Ministry of WCD, the Ministry of External Affairs issued new Passport Rules (https://www.mea.gov.in/pressreleases.html) in 2016 for the benefit of single/divorced mothers and their children including adopted/adoptable children. Now, as per the revised Rules, submission of father's name is not mandatory and a person can obtain passport only by specifying his/her mother's name. Further, a person does not need to submit her/his marriage/divorce certificates.

Legislation on Trafficking

Ministry of Women and Child Development has drafted a comprehensive legislation on Trafficking - Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill, 2017, with a view to fill the existing gaps and cover all aspects of trafficking by including various

offences pertaining to trafficking prevention, protection and rehabilitation of victims. The draft Bill also proposes to tackle trafficking by creating a strong legal, economic and social environment for the victims by putting in place dedicated institutional mechanisms at district, state and national level.

Initiatives for Women

Trafficking of Persons

Human Trafficking is one of the largest organised crimes violating basic human rights. Trafficking in human beings may be for sexual exploitation and many other forms including forced labour, etc. This crime is primarily fuelled by poverty, illiteracy, lack of livelihood options, etc. India is a source, a destination as well as a transit country for trafficking. Majority of the trafficking happens within the country but there are also a large number of persons trafficked from neighbouring countries and to other countries, especially Middle East. Presently, the subject matter of trafficking of persons is dealt with under the provisions of the Indian Penal Code, 1860 and the Immoral Traffic (Prevention) Act, 1956. Section 370 of Indian Penal Code, 1860, only defines and penalises the offence of trafficking of persons and, whereas, the provisions of the Immoral Traffic (Prevention) Act, 1956, deal with trafficking of persons for the purpose of commercial sexual exploitation and it does not recognise trafficking of persons for the purpose of physical and other forms of exploitation.

Ujjawala Scheme

Ujjawala is a comprehensive scheme to combat trafficking. The Scheme was launched in 2007 with the objective to prevent trafficking of women and children for commercial sexual exploitation, to facilitate rescue of victims and placing them in safe custody, to provide rehabilitation services by providing basic amenities/needs, to facilitate reintegration of victims into the family and society, to facilitate repatriation of cross-border victims. The Scheme is being implemented mainly through the non-governmental organisations (NGOs). The norms of the Ujjawala scheme have been revised from April 1, 2016. Under the revised norms, the budgetary provisions have been increased and the Scheme is being implemented through the states/UTs as a sub-scheme of

the Centrally Sponsored Umbrella Scheme Protection and Empowerment of Women. The cost sharing ratio for the scheme is 60:30:10 between centre, state and implementation agency except for North-Eastern states and Himalayan states where it is 80:10:10. In union territories, the ratio between the centre and implementing agency is 90:10.

NRI Marriages

Many a times women are deserted, face violence and have issues in their marriages to NRI men. These cases are difficult to resolve due to application of cross-border laws. The Government of India has constituted an Expert Committee to look into the issues and difficulties faced by Indian nationals married to overseas nationals of Indian origin and suggest amendments in existing laws/ policies/regulation.

Nirbhaya Fund

The Government had set up a dedicated fund called Nirbhaya Fund in 2013, for implementation of initiatives aimed at enhancing the safety and security for women in the country. Under the scheme, the central ministries/departments and state governments/UT administrations send proposals factoring in women safety issues in their sector within the public sphere. The Ministry is the nodal authority for appraising/ recommending any proposals. A number of projects are being implemented under the Nirbhaya Fund, for the safety and security of women. A robust online MIS has been developed to track implementation of all the projects under it.

Nari Shakti Puraskar

Every year, International Women's Day is celebrated on 8th March. On this day, a large number of events are held across the country to inspire and celebrate achievements of women in various spheres. On this occasion, Nari Shakti Puraskars are given to individuals and institutions that have rendered distinguished services to the cause of women empowerment. In 2019, the Ministry announced 44 national level awards including three awards under the institutional category. The awards carry a cash prize of one lakh rupees each and a certificate.

Children's Issues

Children are the future of any country. Well-being of children is essential for country's development as they constitute the future human resource of the country. A major part of India's population—around 158 million - consist of children in the age of 0-6 years (2011 Census). The Ministry of Women and 6Child Development is administering various schemes for the welfare, development and protection of children.

Missing/Trafficked/Runaway Children

Khoya-Paya Portal: In order to bring citizen participation for protecting children, a new citizen-based portal Khoya-Paya was launched in 2015 which enables posting of information of missing and sighted children. It also provides facility for matching the two databases - missing and sighted children. Between June 2015 and March 2017, 7,671 missing/sighted children cases were closed on the portal. The railway stations are to have NGOs/Child Help Groups/ Childline Units working with them for restoration of children to their parents/ guardians or their rehabilitation in the absence of parents/guardians.

Awareness campaign via posters in railway coaches was launched in 2015. One lakh posters have been put in trains in the first phase.

Expansion of Childline:This Childline is a nation-wide initiative for rescuing and assisting children in distress conditions. Over the years, Childline (1098 helpline number) has been extended to more locations from 316 cities and is to be expanded to another 100 cities soon.

POCSO e-Box

Children are often unable to complain about sexual abuse because it is usually done by someone known to them. In order to provide them with a safe and anonymous mode of making a complaint, an internet based facility, e-Box, has been provided. Here, a child or anyone on his/her behalf can file a complaint with minimal details. As soon as the complaint is filed, a trained counsellor immediately contacts the child and provides assistance. The counsellor also registers a formal complaint on behalf of the child wherever required. POCSO e-Box, launched in 2016, has received and handled several complaints.

Juvenile Justice

The Juvenile Justice (Care and Protection of Children) Model Rules, 2016 (JJ Model Rules, 2016) was notified thereby repealing the Juvenile

Justice (Care and Protection of Children) Rules, 2007 (JJ Rules, 2007). The JJ Model Rules, 2016, are based on the philosophy that children need to be reformed and reintegrated into society. The Rules are appreciative of the developmental needs of children and therefore the best interest of the child is the primary consideration. Child-friendly procedures are incorporated across the board. The JJ Model Rules, 2016, prescribe detailed child-friendly procedures for the police, Juvenile Justice Board and children's court. Some of these procedures include: no child to be sent to jail or lock-up; no child to be handcuffed, a child to be provided appropriate medical assistance; parent/guardian to be informed about legal aid, etc. The Juvenile Justice Board and the Children's Court are required to put the child at ease and to encourage him/her to state the facts and circumstances without any fear, after understanding the questions put across in a language understood by the child.

Various new forms have been added in the JJ Model Rules, 2016, to review the progress of children in Juvenile Justice System and to ensure adequate rehabilitation and restoration services for them. Some of the new forms are case monitoring sheet; detailed individual child care plan; application for registration of child care institutions; certificate for registration; quarterly report by Juvenile Justice Board/Child Welfare Committee; etc. Further, monitoring provisions have been strengthened.

Comprehensive Adoption Reforms

Government has notified Juvenile Justice Act, 2015, and Chapter VIII of the Act provisions for adoption of orphaned, abandoned and surrendered children and also adoption of children by relatives. The Act has adequate safeguards for the children to ensure their best interest and it provides for reporting of all adoptions in the country including relative adoptions. Further, all adoptions under the Act have to proceed as per the Adoption Regulations framed by Central Adoption. Central Adoption Resource Agency has been reconstituted as Central Adoption Resource Authority (CARA) under this Act.

The Adoption Regulations were notified in 2017 and in supersession of Guidelines Governing Adoption of Children, 2015. Registering online with Central Adoptions Resource Authority (CARA) is mandatory to adopt a child from anywhere in India. Central Adoption Resource Information and Guidance System (CARINGS) is the only official portal

of CARA for legal adoption process. Under Section 80 and 81 of the Juvenile Justice (Care and Protection of Children) Act, 2015, any person or agency who indulges in illegal adoption shall be punished. By adopting a child illegally, one may unintentionally become part of a child trafficking network. Adoption is a socio-legal process and there is no role of touts/middlemen in it as they may mislead people to adopt a child illegally. The Adoption Regulations contain the provisions for in-country and inter-country adoptions of OAS (orphaned, abandoned and surrendered) children. Procedures related to adoption by relatives both within the country and abroad have been defined in the Regulations. Adoption of step-children has been brought in. There are 32 schedules annexed to the Regulations including model adoption applications to be filed in the court and this would considerably address delays prevalent in obtaining the court order.

National Nutrition Mission

National Nutrition Mission (NNM) is proposed to achieve improvement in nutritional status of children (0-6years), adolescent girls and pregnant women and lactating mothers in a time-bound manner over a period of three years with the objectives of preventing and reducing undernutrition in children (0-3 years); reducing the prevalence of anaemia among young children (6-59 months); reducing the prevalence of anaemia among women and adolescent girls (15-49 years); and reducing low birth weight.

Anganwadi Services

The Integrated Child Development Services (ICDS) Scheme now known as Anganwadi Services Scheme was launched in 1975 with the objective to improve the nutritional and health status of children in the agegroup 0-6 years; lay the foundation for proper psychological, physical and social development of the child; reduce the incidence of mortality, morbidity, malnutrition and school dropouts; achieve effective coordination of policy and implementation amongst the various departments to promote child development; and enhance the capability of the mothers to look after the normal health and nutritional needs of the children through proper nutrition and health education. The beneficiaries of the scheme are children below six years of age, pregnant and lactating

mothers. It is self selecting and is open to all the beneficiaries without any pre-condition.

These objectives are achieved by providing a package of six services by AWWs/AWHs under the ICDS scheme, viz., supplementary nutrition; pre-school non-formal education; nutrition and health education; immunisation; health checkup; and referral services. The concept of providing a package of services is based primarily on the consideration that the overall impact will be much larger if the different services develop in an integrated manner as the efficacy of a particular service depends upon the support it receives from related services. These services are provided through 14 lakhs sanctioned Anganwadis spread across the country. Sections 4, 5, 6 and 7 of the National Food Security Act are applicable to the ICDS as these Sections make a provision for providing nutritious food to the children including malnourished children and pregnant and lactating mothers. As per the provisions of the Act, the Rules for providing Supplementary Nutrition Programme (SNP) under the ICDS were notified in 201 7.

Improving Anganwadi Infrastructure

The government is committed to repositioning the Anganwadi Centre (AWC) as a vibrant early childhood development centre to become the first village outpost for health, nutrition and early learning. Towards this end, several steps have been taken for improvement and strengthening of ICDS scheme covering programmatic, management and institutional areas.

Supplementary Nutrition

In pursuance of the provisions contained in the National Food Security Act (NFSA), 2013, the Ministry has notified the (under the Integrated Child Development Scheme Rules, 2017) in 201 7 to regulate the entitlement specified under provisions of said Act for every pregnant woman and lactating mother till 6 months after child birth, and every child in the age group of 6 months to 6 years (including those suffering from malnutrition) for 300 days in a year, as per the nutritional standards specified in Schedule II of the said Act. In case of non-supply of the entitled quantities of foodgrains or meals to entitled persons, such persons shall be entitled to receive such food security allowance from the

concerned state government, within such time and manner as may be prescribed by the central government.

ICDS System

MWCD implementing International Development Association (IDA) assisted in 162 high-burden districts of 8 states inthe country covering 3.68 lakh Anganwadi Centres with the following project development objectives: (i) to strengthen the Integrated Child Development Services (ICDS) policy framework, systems and capacities, and facilitate community engagement, to ensure greater focus on children under three years of age; (ii) to strengthen convergent actions for improved nutrition outcomes. One of the key activities in ICDS System's Strengthening and Nutrition Improvement Project (ISSNIP) is Information and Communication Technology enabled Real Time Monitoring (ICT-RTM) of ICDS. It intends to leverage ICT to set up a real time monitoring system for improving the service delivery mechanism and ensuring better supervision of ICDS Scheme by deploying a mobile solution driven by a customised ICDS-Common Application Software (ICDS-CAS) at the Anganwadi Centres in selected states. A memorandum of co-operation was signed with Bill and Melinda Gates Foundation (BMGF) to support the design, development and deployment of Common Application Software (CAS) to drive the IT enabled Real Time Monitoring of ICDS and Support System. Accordingly, a customised Common Application software (ICDS-CAS) has been developed.

Scheme for Adolescent Girls

Scheme for Adolescent Girls (SAG) was introduced in 2010-11 and is operational in 205 selected districts across the country. It aims at all-round on pilot basis development of adolescent girls of 11 -18 years.The Scheme is being implemented through the state governments/UTs with the cost sharing ratio between the centre and the states and UTs (with legislatures) in the ratio of 50:50 for nutrition and 60:40 for rest of the components. For eight north-eastern states (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim) and three special category Himalayan states (H.P., former state of J&K and Uttarakhand), the share of centre and state is in the ratio of 90:10. Union territories (without legislatures) are funded 100 per cent of the financial norms or the actual expenditure incurred whichever is less. Anganwadi

Centre (AWC) is the focal point for the delivery of the services. The Scheme has two major components- nutrition and non-nutrition.

Under the nutrition component, the out-of-school adolescent girls (11 -14years) attending AWCs and all girls (14-18 years) are provided supplementary nutrition in the form of take-home ration/hot cooked meal. Each adolescent girl is given 600 calories and 18-20 grams of protein and micronutrients (which is approx. 1/3 of recommended dietary allowance) per day for 300 days in a year. The nutrition provided is as per the norms for pregnant and lactating mothers. While the nutrition component aims at improving the health and nutrition status of the adolescent girls, the non-nutrition component, addresses the development needs. In the non-nutrition component, out-of-school adolescent girls of 11 -18 years are being provided IFA supplementation; health check-up; and referral services; nutrition and health education; Adolescent Reproductive Sexual Health (ARSH) counselling/ guidance on family welfare; life skill education; guidance on accessing public services; and vocational training (only 16-18 year old adolescent girls). The Scheme also aims at mainstreaming out-of-school girls to school system.

Junk Food Guidelines

Junk Food Guidelines have been developed and forwarded to Ministry of Education and MoHFW for implementation. Ministry of Education has requested all CBSE affiliated schools to follow them. Ministry of Education has been requested to issue an advisory to all the states/UTs accordingly. It has also been suggested in the guidelines that vendors/street vendors should not be permitted to sell these foods during school timings in a vicinity of 200 meters from any school. The guidelines also provide a list of suitable food items to be offered in the school canteen.

Major Initiatives of Food and Nutrition Board

Food and Nutrition Board (FNB) under MWCD is in process of setting up of 4 food testing Laboratories, viz., central laboratory at Faridabad and 3 regional food testing laboratories at Mumbai, Chennai and Kolkata for analysing the food and nutritional supplements for food safety and quality to ensure nutritional and feeding norms for supplementary nutrition in ICDS Scheme.

MWCD, taking note of the widely prevalent deficiencies of iron, vitamin A, iodine and other micronutrients in the population, particularly among women and children, has taken the initiative towards addressing this issue through fortification of foods. In this regard, a comprehensive regulation on fortification of Foods namely Food Safety and Standards (Fortification of Foods) Regulations, 2016 was operationalised which sets the standards for fortification of major staple foods namely, wheat flour, rice, milk, edible oil and salt. A logo has also been launched.

National Plan of Action for Children

The National Plan of Action for Children (NPAC), 2016, is based on the principles embedded in the National Policy for Children, 2013. The Action Plan has four key priority areas: survival, health and nutrition; education and development; protection; and participation. The NPAC seeks to ensure convergence of ongoing programmes and initiation of new programmes so as to focus on objectives through well-defined strategies and activities to achieve desired level of outcome for children.

National Creche Scheme

The National Creche Scheme is being implemented as a centrally sponsored scheme through the states/UTs from 2017 to provide day-care facilities to children of working mothers and other deserving women. The fund sharing pattern for all recurring components of the scheme is: (i) for states, 60:30:10 amongst centre, states and organisations/institutions running the creches; (ii) for North Eastern Region states and Himalayan states, 80:10:10 amongst centre, states and organisations/institutions running the creches; and (iii) for UTs, 90:10 between Centre & organisations/institutions running the creches.

National Early Childhood Care and Education

Ministry launched the National Early Childhood Care and Education (NECCE) Policy in 2013. The Policy lays down the way forward for a comprehensive approach towards ensuring a sound foundation for survival, growth and development of child with focus on care and early learning. It recognises the synergistic and interdependent relationship between the health, nutrition, psycho-social and emotional needs of the child. This would add impetus to the policy activities mentioned in the revised service package of ICDS. The National ECCE council has been recognised as a national level organisation under the Ministry as notified

by the Government of India, for providing systems of training, curriculum framework, standards and related activities; and promoting action research with an aim to improve the field of early childhood care and education. The main objective of the Council is to embed the concept and practice for holistic and integrated development with requisite quality for young children in the age group of 0-6 years.

Training of ICDS Functionaries on ECCE: With the development of annual contextualised curriculum, assessment cards and activity books for children, it has become imperative to conduct ECCE training for different functionaries for implementing the ECCE curriculum in the AWCs. Under POSHAN Abhiyaan in collaboration with UNICEF, 21 e-ECCE On-line Modules have been developed in line with existing off-line ECCE modules under POSHAN Abhiyaan to be used by Anganwadi Services key functionaries.

Enrolment of Children below Six Years Under Aadhaar

The Aadhaar Act has been notified conferring legal status upon the Unique Identification Authority of India (UIDAI) to issue Aadhaar to residents of India including children below five years. UIDAI has advised WCD department of states/UTs to get on-boarded as Registrar for Aadhaar enrolment of children below five years. The services under the Anganwadi Services are delivered through Anganwadi Centres to the target group of children (0-6 years) and these children are more easily accessible at the Anganwadi Centres. It has been impressed upon the states/UTs to set up Aadhaar Enrolment Camps to ensure that every child beneficiary has Aadhaar. Thereafter, states/UTs have been asked for organising Aadhaar Enrolment Camps at least twice a year in every Anganwadi to ensure that every new child beneficiary joining AWC has Aadhaar.

Miscellaneous Issues

Direct Benefit Transfer

Government of India adopted Direct Benefit Transfer (DBT) using Aadhaar as the identifier of beneficiaries for delivery of services, benefits or subsidies of various central sector and centrally sponsored schemes to individuals as well as groups where money is spent from the Consolidated Fund of India. In pursuance of directions of the government

for implementation of DBT in its schemes, MWCD has identified 15 schemes/components for its implementation.

For transfer of maternity benefits under Pradhan Mantri Matru Vandana Yojana, the Ministry has launched https://pmmvy-cas.nic.in/ portal for direct transfer of incentives in the account of the beneficiary. This portal is also local government director code (LGD) embedded and hence records the location.

Engagement on Social Media

The Ministry is active on social media platforms of Facebook, Twitter and YouTube with followers numbering in lakhs. Social media is being used as a medium to spread awareness among the general public on issues concerning women and children, aiding positive attitude and behaviour change. This medium is also being leveraged to disseminate information on the various schemes and programmes of the government so as to increase citizen engagement. In line with the agenda of the government to use the power and reach of social media to reach out to citizens, the Ministry has started # HelpMeWCD where women and children can send in their grievances. The Ministry is also running a grievance redressal cell which registers and responds to direct complaints via email from women and children across the country.

Organisations under WCD

The Ministry of Women and Child Development has six autonomous organisations as well. These are:

National Institute of Public Cooperation and Child Development

National Institute of Public Cooperation and Child Development popularly known as NIPCCD, is a premier organisation devoted to promotion of voluntary action research, training and documentation in the overall domain of women and child development. Established in New Delhi in 1966 under Societies Registration Act of 1860, it functions to cater to the region-specific requirements of the country. The Institute, over a period of time, has established four Regional Centres at Guwahati (1978), Bengaluru (1980), Lucknow (1982) and Indore (2001). The Institute functions as an apex institution for training functionaries of the Integrated Child Development Services (ICDS) programme. As a nodal resource agency, it has also been entrusted with the responsibility of

training and capacity building of functionaries at the national and regional level, under the new scheme of Integrated Child Protection Scheme (ICPS). It has also been designated as the nodal institution for imparting training on two important issues of Child Rights and Prevention of Trafficking of women and children for SAARC countries.

National Commission for Women

The National Commission for Women was set up as statutory body in 1992 under the National Commission for Women Act, 1990, to review the Constitutional and legal safeguards for women; recommend remedial legislative measures; facilitate redressal of grievances; and advise the government on all policy matters affecting women. The Commission may, among others, investigate and examine all matters relating to the safeguards provided for women under the Constitution and other laws; present to the central government, annually and at such other times as the Commission may deem fit, make such reports/recommendations for the effective implementation of those safeguards for improving the conditions of women by the Union or any state; review, from time to time, the exiting provisions of the Constitution and other laws affecting women and recommend amendments thereto so as to suggest remedial legislative measures to meet any lacunae, inadequacies or shortcomings in such legislations; and take up cases of violation of the provisions of the Constitution and of other laws relating to women with the appropriate authorities, look into complaints, etc.

National Commission for Protection of Child Rights

The National Commission for Protection of Child Rights (NCPCR) was set up in 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005. NCPCR is a statutory body to ensure that all laws, policies, programmes, and administrative mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child. The child is defined as a person in the 0 to 18 years age group. The Commission visualises a rights-based perspective, along with nuanced responses at the state, district and block levels, taking care of specificity and strengths of each region. In order to touch every child, it seeks a deeper penetration to communities and households and expects that the ground experiences

gathered at the field are taken into consideration by all the authorities at the higher level.

Central Adoption Resource Authority

Central Adoption Resource Authority (CARA) is a statutory body that functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions. CARA is designated as the central authority to deal with inter-country adoptions in accordance with the provisions of the Hague Convention on Inter-country Adoption, 1993, ratified by Government of India in 2003. CARA primarily deals with adoption of orphan, abandoned and surrendered children through its associated/recognised adoption agencies.

Central Social Welfare Board

The Central Social Welfare Board was established in 1953 to carry out welfare activities for promoting voluntarism, providing technical and financial assistance to the voluntary organisations for the general welfare of family, women and children. This was the first effort to set up an organisation, which would work on the principle of voluntarism as a non-governmental organisation. The objective of setting up the Board is to work as a link between the government and the people.

Rashtriya Mahila Kosh

Rashtriya Mahila Kosh (RMK) was established in 1993 as an autonomous body and was registered under the Societies Registration Act, 1860. RMK is a national level organisation for socio-economic empowerment of women. The operating model currently followed by RMK is that of a facilitating agency wherein it provides loans to NGO-MFIs termed as Intermediary Organisations (IMO). In addition, RMK also has appointed nodal agencies and franchisees for furthering of its objectives of reaching out to the women beneficiaries with easy access of micro-credit for income-generating activities. The main objective of RMK is to provide micro-credit to poor women for various livelihood support and income-generating activities at concessional terms in a client-friendly procedure to bring about their socio-economic development.

29 Youth Affairs and Sports

THE Ministry of Youth Affairs and Sports functioned under the overall guidance of the Minister of State (Independent Charge) for Youth Affairs and Sports during the year. In April 2008, two separate Departments, namely, Department of Youth Affairs and Department of Sports, were created under the Ministry.

The youth represent the most dynamic and vibrant segment of the population. India is one of the youngest nations in the world, with about 65 per cent of the population under 35 years of age. The youth in the age group of 15-29 years comprises 27.5 per cent of the population. This 'demographic dividend' offers a great opportunity. In order to capture this demographic dividend, it is essential that the economy has the ability to support the increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. The Government of India makes significant investment on programmes for the youth, through various ministries/departments.

Website : www.yas.nic.in

National Youth Policy

The National Youth Policy, 2014 (NYP-2014) was launched in 2014, replacing the erstwhile National Youth Policy, 2003. NYP-2014 has been finalised after extensive consultations with all the stakeholders. The Policy defines 'youth' as persons in the agegroup of 15-29 years.

Schemes for Youth

The Department of Youth Affairs operates a number of schemes for development and empowerment of youth. Some of the schemes had annual outlay of less than ₹ 10 crores. In order to improve the effectiveness of these schemes, it was considered necessary to merge these schemes into a single scheme, which can act as the flagship scheme

of the Department. This would help in achieving better synergies between the schemes and thereby, improve their effectiveness and help in achieving better outcomes with the available resources.

The Department undertook a comprehensive exercise to re-structure/ consolidate all the schemes which are now being operated by Department of Youth Affairs into 3 flagship schemes as follows:

S.No.	Names of Old Schemes	Names of New Schemes
1.	Nehru Yuva Kendra Sangathan (NYKS)	Merged into a new 'umbrella' Scheme called "Rashtriya Yuva Sashaktikaran Karyakram (RYSK)".
2.	National Youth Corps (NYC)	
3.	National Programme for Youth & Adolescent Development (NPYAD)	
4.	International Cooperation	
5.	Youth Hostels (YH)	
6.	Assistance to Scouting & Guiding Organisations	
7.	National Discipline Scheme (NDS)	
8.	National Young Leaders Programme (NYLP)	
9.	National Service Scheme (NSS)	National Service Scheme (NSS)
10.	Rajiv Gandhi National Institute of Youth Development (RGNIYD)	Rajiv Gandhi National Institute of Youth Development (RGNIYD)

Rashtriya Yuva Sashaktikaran Karyakram

Nehru Yuva Kendra Sangathan

Nehru Yuva Kendra Sangathan (NYKS), launched in 1972, is one of the largest youth organisations in the world. NYKS currently has about 8.7 million youth enrolled through 3.04 lakh youth clubs/mahila mandals. NYKS has presence in 623 districts through Nehru Yuva Kendras

(NYKs). The objective of the programme is to develop the personality and leadership qualities of the youth and to engage them in nation-building activities. The areas of focus of the NYKS activities include literacy and education; health and family welfare; sanitation and cleanliness; environment conservation; awareness on social issues; women empowerment; rural development; skill development and self-employment, entrepreneurship development; civic education; disaster relief and rehabilitation, etc. The youth associated with Nehru Yuva Kendras are not only socially aware and motivated but are also inclined towards social development work through voluntary efforts.

National Youth Corps

The Scheme of National Youth Corps (NYC) was launched in 2010-11 and the same is being implemented through NYKS. The main objectives of the Scheme are as follows: to set up a group of disciplined and dedicated youth who have the inclination and spirit to engage in the task of nation-building; to facilitate the realisation of inclusive growth (both social and economic); to act as group modulators and peer group educators; and to act as role models for the younger cohort, especially towards enhancement of public ethics, probity and dignity of labour.

Under it, youth in the agegroup of 18-25 years are engaged as volunteers to serve up to maximum 2 years in nation-building activities. The minimum qualification for NYC volunteers is Class-X passed and they were initially paid an honorarium of ₹ 2,500 per month, but the same was increased to ₹ 5,000 per month from 2016. The selection of NYC volunteers is done by a selection committee, headed by District Collector/Deputy Commissioner of the concerned district. The volunteers are given 15-day induction training at the time of joining and 7-day refresher training in the second year of their tenure. Normally, 2 NYC volunteers are deployed in every block. They act as an extended arm of NYKS in the block and play an active role in implementation of various programmes and initiatives of NYKS.

National Service Scheme

National Service Scheme (NSS) was introduced in 1969 with the primary objective of developing the personality and character of the youth through voluntary community service. Education through Service

is the purpose of the NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. Very appropriately, the motto of NSS is “not me, but you”. An NSS volunteer places the ’community’ before ’self. NSS aims at developing the following qualities/ competencies among the volunteers: to understand the community in which the NSS volunteers work and to understand themselves in relation to their community; to identify the needs and problems of the community and involve themselves in problem-solving exercise; to develop among themselves a sense of social and civic responsibility; to utilise their knowledge in finding practical solutions to individual and community problems; to gain skills in mobilising community participation; and to practise national integration and social harmony.

Rajiv Gandhi National Institute of Youth Development

Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an ’Institute of National Importance’ under the Ministry of Youth Affairs and Sports. The RGNIYD was set up in 1993 as a society under the Societies Registration Act, 1975, and was conferred the status of ’Deemed to be University’ under ’de-novo’ category in 2008, by the then Ministry of Human Resources Development. The Institute functions as a vital resource centre with its multi-faceted functions of offering academic programmes at postgraduate level encompassing various dimensions of youth development, engaging in seminal research in the vital areas of youth development and conducting training/capacity building programmes in youth development, besides the extension and outreach initiatives across the country.

National Programme for Youth and Adolescent Development

National Programme for Youth and Adolescent Development (NPYAD) scheme was introduced in 2008. Under it, financial assistance is provided to government/non-government organisations for taking up youth and adolescent activities. The assistance under NPYAD is provided under 5 major components:

(a) youth leadership and personality development training; (b) promotion of national integration; (c) promotion of adventure; Tenzing Norgay

National Adventure Awards; (d) development and empowerment of adolescents; and (e) technical and resource development.

National Youth Festival

Under promotion of national integration of NPYAD, a National Youth Festival is organised in January every year to commemorate the birth anniversary of Swami Vivekananda (12th January), which is celebrated as National Youth Day. The festival is organised in one of the states willing and equipped to host it. The expenditure is shared between the centre and the host state. The programmes organised include various cultural programmes (both competitive and non-competitive), youth convention, suvichar, exhibitions, adventure programmes, etc. About 5,000 youth from various states/ UTs of the country participate in the festival.

Youth Hostels

Youth Hostels are built to promote youth travel and to enable the young people to experience the rich cultural heritage of the country. The construction of the youth hostels is a joint venture of the central and state governments. While the central government bears the cost of construction, the state governments provide fully developed land free-of-cost, with water supply, electricity connection and approach roads. Youth hostels are located in areas of historical and cultural value, in educational centres, in tourist destinations, etc. Such hostels provide good accommodation for the youth at reasonable rates. Out of 83 currently operational hostels, 11 have been transferred to Nehru Yuva Kendra Sangathan, Sports Authority of India, concerned state governments, for optimum use for youth and sports development and the remaining 72 hostels are under direct control of the Ministry.

Assistance to Scouting and Guiding Organisation

The Department provides assistance to the scouting and guiding organisations, with a view to promote the scouts and guides movement in the country. This is an international movement aimed at building character, confidence, idealism and spirit of patriotism and service among young boys and girls. Scouting and guiding also seeks to promote balanced physical and mental development among the boys and girls. The financial assistance is provided to scouting and guiding organisations for various programmes such as organisation of training camps, skill development programmes, holding of jamborees, etc. The activities,

interalia, include programmes related to adult literacy, environment conservation, community service, health awareness and promotion of hygiene and sanitation.

National Young Leaders Programme

A new Central Sector Scheme, 'National Young Leaders Programme (NYLP)', was formulated with a view to develop leadership qualities among the youth to enable them to realise their full potential and in the process, to contribute to the nation-building process. The scheme was launched in 2014. The programme aims at motivating the youth to strive for excellence in their respective fields and to bring them to the forefront of the development process. It seeks to harness the immense youth energy for national-building.The programme beneficiaries are the youth in the agegroup of 15-29 years, in line with the definition of 'youth' in the National Youth Policy, 2014. This central sector scheme has the following components: Neighbourhood Youth Parliament (NYP); Youth for Development Programme (YFDP); National Young Leaders Awards (NYLA); National Youth Advisory Council (NYAC); and National Youth Development Fund (NYDF).

Sports

Sports and games have always been seen as an integral component in all-round development of human personality. Apart from being means of entertainment and physical fitness, sports have also played a great role in generation of spirit of healthy competition and bonding within the community. Achievements in sports have always been a source of national pride and prestige. With modern sports being highly competitive, the use of modern infrastructure, equipment and advanced scientific support has changed the scenario of sports at the international level. Keeping in line with the growing demands for advanced infrastructure, equipment and scientific support, Government of India has taken several initiatives and is providing the necessary assistance to sportspersons by way of training and exposure in international competitions backed up with scientific and equipment support.

National Sports Policy

National Sports Policy, 2001, envisages mainly broadbasing and promotion of excellence in sports. The salient features of this Policy are: (i) broadbasing of sports and achievement of excellence; (ii) upgradation and development of infrastructure; (iii) support to national sports federations and other appropriate bodies; (iv) strengthening of scientific and coaching support to sports; (v) incentives to promote sports; (vi) enhanced participation of women, scheduled tribes and rural youth; (vii) involvement of corporate sector in sports promotion; and (viii) promotion of sports mindedness among the public at large.

Sports Authority of India

The Sports Authority of India (SAI) was established in 1984 as a registered society primarily to ensure effective maintenance and optimum utilisation of the sports infrastructure that was built in Delhi during ASIAD, 1982. It is now the nodal agency in the country for broadbasing sports and for training of sportspersons to achieve excellence in national and international sports. The Society for National Institute of Physical Education and Sports (SNIPES) was merged with SAI in 1987. Subsequently, Netaji Subhash National Institute of Sports (NSNIS), Patiala and its allied centres at Bengaluru, Kolkata and Gandhinagar, and Lakshmibai National College of Physical Education at Thiruvananthapuram came under SAI. It has now regional centres at Bengaluru, Gandhinagar, Kolkata, Sonepat, Bhopal, Imphal, Chandigarh and Lucknow. SAI also operates a High Altitude Training Center (HATC) at Shillaroo (HP). SAI operates various schemes at sub-junior, junior and senior levels, namely, National Sports Talent Contest (NSTC), Army Boys Sports Company (ABSC), SAI Training Centres (STC) and Special Area Games to achieve excellence at national and international level. SAI has also set up centres of excellence for elite sportspersons at each of its regional centres and one at the National Institute of Sports, Patiala. With a view to promote sports on single discipline basis, National Sports Academies have been set up by SAI, in collaboration with the National Sports Federations to attract sports talent in the respective sports discipline in the age group of 14-25 years. The Scheme envisages modern training centres having state-of-the-art sports facilities, equipment, requisite sports science infrastructure as well as qualified personnel to meet the daily requirement of the trainees.

For optimum utilisation of its five stadia which were renovated at substantial cost for Commonwealth Games, 2010, Sports Authority of India introduced 'Come and Play Scheme' in 2011. The designated areas in the SAI stadia, viz., Jawaharlal Nehru Stadium; Dr. Kami Singh Shooting Ranges; Dr. SPM Swimming Pool Complex; Major Dhyan Chand Hockey Stadium and Indira Gandhi Indoor Stadium (Gymnastics, Wrestling and Cycling Velodrome) were thrown open in 2011 for both imparting professional training to establish sportspersons and also to beginners with the objective of encouraging participation in sports and for optimum utilisation of stadia.

After the successful launch of the scheme in Delhi, SAI launched the 'Come and Play Scheme' in all its centres spread across the country from 2011 with the objective of encouraging the local youth to use the sports facilities available at these centres and to impart coaching, primarily to the beginners, to encourage participation in sports.

Lakshmibai National Institute of Physical Education

The Institute was established initially as a college in 1957, the centenary year of the first war of Independence. The University is located at Gwalior, where Rani Lakshmibai of Jhansi had laid down her life for the country's freedom struggle. In recognition of the services rendered in the field of physical education and sports by the Institute, it was upgraded to a "Deemed University" in 1995. The Lakshmibai National Institute of Physical Education (LNIPE) is fully funded by the Government of India. The Institute offers the following full-time courses: (1) Bachelor of Physical Education (BPE) (4 year degree course); (2) Master of Physical Education (MPE) (2 year course); (3) M.Phil, in Physical Education (1 year course); and (4) Ph.D. in Physical Education. Apart from these, following certificate, diploma and postgraduate courses are also being conducted by the Institute: (a) adventure sports; (b) special sports; (c) youth affairs; (d) information technology; (e) sports coaching; (f) yoga and alternate therapies; (g) sports management; and (h) sports journalism. The Institute also conducts in-service training programmes in physical education for ex-army personnel, refresher/orientation course for physical education teachers in universities, colleges and schools. The Institute attracts

students from abroad also. A North East Campus of LNIPE has also been established at Guwahati (Assam) and is functioning since 2010-11.

National Sports University

In recognition of the talent and contribution of the sportspersons of the north-eastern states in general and Manipur in particular, the Government of India decided to set up a National Sports University in Manipur. The Manipur government has provided land measuring 325.90 acres in west Imphal District for setting up of this University. It will be first of its kind, to promote sports education in the areas of sports sciences, sports technology, sports management and sports coaching besides functioning as the national training centre for select sports disciplines by adopting best international practices. The University will impart Bachelor's, Master's and Doctoral programmes in sports coaching, sports sciences and physical education in various disciplines. Specialised degree programmes in various sports education and coaching disciplines are envisaged in the future. From the academic session 2018-19, M.Sc. (Sports Coaching) and M.A. (Sports Psychology) have been introduced.

Khelo India

The Ministry of Youth Affairs and Sports was implementing a centrally sponsored scheme called the Panchayat Yuva Krida aur Khel Abhiyan (PYKKA) from 2008-09 to 201 3-14. The scheme aimed at creation of basic sports infrastructure at village and block/Panchayat levels through development and maintenance of playgrounds and mass participation in sports through conduct of annual sports competitions. Separately, an Urban Sports Infrastructure Scheme (USIS) was also introduced in 2010-11 and continued up to 2015-16. The PYKKA scheme provided for mid-term review. Accordingly, the scheme was reviewed and revamped as the Rajiv Gandhi Khel Abhiyan (RGKA), implemented during 2014-15 to 2015-16, which envisaged construction of block level sports complex, comprising both indoor and outdoor playing facilities through convergence with other schemes of the government; and conducting of competitions for block level and upwards. A new umbrella Scheme "Khelo India" was launched during 2016-17 after merger of

existing scheme Rajiv Gandhi Khel Abhiyan (RGKA), Urban Sports Infrastructure Scheme (USIS) and National Sports Talent Search System Programme (NSTSSP).

The revamped Khelo India has been evolved after a lot of deliberations with all stakeholders, including departments of sports of states and UTs. The Scheme is being implemented as a central sector scheme. The revamped Khelo India has twelve components, which aim at achieving the twin objectives of the National Sports Policy 2001- broadbasing of sports and achieving excellence in sports, which in turn will infuse sports culture in the country and enable it to derive benefits that sports offers, namely, holistic development of children and youth; community development; gender equity; healthy nation; national pride; and economic opportunities related to sport development.

Its 12 verticals are: play field development; community coaching development; state level Khelo India centres; annual sports competitions; talent search and development; utilisation and creation/upgradation of sports infrastructure; support to national/regional/state sports academies; physical fitness of school-going children; sports for women; promotion of sports among persons with disabilities; sports for peace and development; and promotion of rural and indigenous/tribal games.

Promotion of Excellence in Sports

Scheme of Assistance to National Sports Federations

Under this Scheme, the Government of India provides assistance to National Sports Federations (NSFs) for conducting national championships and international tournaments, participation in international tournaments abroad, organising coaching camps, procuring sports equipment, engagement of foreign coaches, etc.

Scheme of Human Resources Development in Sports

The Scheme of Human Resource Development in Sports, was launched in the 2013-14 after a thorough revision of the "Scheme of Talent Search and Training". The main focus of the Scheme is to give emphasis on the academic and intellectual side of sports management by awarding Fellowships to deserving candidates for specialised studies at Masters' and Doctoral level. The scheme also extends financial

assistance for training/seminars/conferences/workshops and short-term courses for coaches, technical and support staff at national and international levels.

National Sports Development Fund

The National Sports Development Fund (NSDF) was instituted with a view to mobilising resources from the government as well as non-governmental sources, including the private/corporate sector and non-resident Indians, for promotion of sports and games in the country. To make contributions to the fund attractive, 100 per cent exemption from income tax is available on all contributions. The funds available under NSDF are used for promotion of sports in general and specific sports disciplines and individual sportspersons for achieving excellence at the national and international level in particular; imparting special training and coaching in relevant sport disciplines to sportspersons, coaches and sports specialists; to construct and maintain infrastructure as may be required for promotion of excellence in sports; to supply equipment to governmental and non-governmental organisations and individuals with a view to promoting excellence in sports; to identify problems and take up research and development studies for providing support to excellence in sports, etc.

Incentive Schemes for Sportspersons

Various schemes to give incentives to sportspersons to take up sports are also implemented by the Ministry.

Rajiv Gandhi Khel Ratna Award

The Scheme was launched in 1991-92 with the objective of honouring sportspersons to enhance their general status and to give them greater dignity and place of honour in society. Under it, an amount of ₹ 7.5 lakh is given as award for the most spectacular and outstanding performance by a sportsperson over a period of four years immediately preceding the year in which award is to be given.

For 2020, this award has been conferred upon Shri Rohit Sharma for cricket, Ms. Manika Gupta for table tennis, Shri Mariyappan T. for para athletics, Ms. Vinesh for wrestling and Ms. Ravi for hockey.

Arjuna Award

The award was instituted in 1961. To be eligible for the award, a sportsperson should not only have good performance consistently for the previous four years at the international level with excellence for the year for which award is recommended, but should have also shown qualities of leadership, sportsmanship and a sense of discipline. The awardee is given a statuette, a certificate, ceremonial dress and a cash award of ₹ 5 lakh. For 2020, 27 sportspersons were given the award in various disciplines.

Dhyan Chand Award for Lifetime Achievement

This award was instituted in 2002. It is given to honour those sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports even after their retirement from active sporting career. The awardee is given a statuette, a certificate, ceremonial dress and a cash award of ₹ 5 lakh. For 2020, this award was given to 15 sportspersons.

Dronacharya Award

This award was instituted in 1985 to honour eminent coaches who have successfully trained sportspersons or teams and enabled them to achieve outstanding results in international competitions. The awardee is given a statuette of Guru Dronacharya, a certificate, ceremonial dress and a cash award of ₹ 5 lakhs. For 2020, 8 persons received the honour in Lifetime category and five in regular categories.

Maulana Abul Kalam Azad Trophy

This trophy was instituted in 1956-57. The top overall performing university in the inter-university tournaments is given the Maulana Abul Kalam Azad (MAKA) Trophy, which is a rolling trophy. A small replica of the MAKA Trophy is also awarded for retention by the university.

Rashtriya Khel Protsahan Puraskar

With a view to recognising the contribution made to sports development by entities other than sportspersons and coaches, the government has instituted a new award called ’Rashtriya Khel Protsahan Puraskar’ from 2009, which has four categories, namely, identification and nurturing of budding/young talent; encouragement to sports through corporate social responsibility; employment of sportspersons and sports

welfare measures; and sports for development. The award consists of a citation and a trophy in each of the just mentioned categories. There is no cash award.

Special Awards to winners in International Sports Events and their Coaches

This Scheme was introduced in 1986 to encourage and motivate outstanding sportspersons for higher achievements and to attract the younger generation to take up sports as a career. Under it, special awards are given to sportspersons and their coaches for winning medals in recognised international sports events held in a year at the following rates:

(a) Category: Open Category Sports

S.No.	Name of Event	Amount of Award Money (in Rupees) Gold Medal	Silver Medal	Bronze Medal
1	Olympic Games (Summer & Winter)	75 lakh	50 lakh	30 lakh
2	Asian Games	30 lakh	20 lakh	10 lakh
3	Commonwealth Games	30 lakh	20 lakh	10 lakh
4	World Championships or World Cup (conducted in Four Year Cycle)/All England Championship of Badminton	40 lakh	25 lakh	15 lakh
5	World Championships/ World Cup (held once in two years)	20 lakh	14 lakh	8 lakh
6	World Championships/World Cup (held annually)	10 lakh	7 lakh	4 lakh
7	Asian Championships (Held once in 4 years)	15 lakh	10 lakh	5 lakh
8	Asian Championships (held once in 2 years)	7.5 lakh	5 lakh	2.5 lakh
9	Asian Championships (held annually)	3.75 lakh	2.5 lakh	1.25 lakh
10	Commonwealth Championships (held once in 4 years)	15 lakh	10 lakh	5 lakh
11	Commonwealth Championships (held once in 2 years)	7.5 lakh	5 lakh	2.5 lakh
12	Commonwealth Championships (held once in 1 year)	3.75 lakh	2.5 lakh	1.25 lakh
13	World University Games	3.75 lakh	2.5 lakh	1.25 lakh

(b) Category: Para-Sports

S.No.	Name of Event	Amount of Award Money (in Rupees)		
		Gold Medal	Silver Medal	Bronze Medal
1	Paralympic Games (Summer & Winter)	75 lakh	50 lakh	30 lakh
2	Para Asian Games	30 lakh	20 lakh	10 lakh
3	Commonwealth Games (Para Athletes)	30 lakh	20 lakh	10 lakh
4	IPC World Cup/ Championship (held biennially)	20 lakh	14 lakh	8 lakh
5	IPC World Cup/ Championship (held biennially)	10 lakh	7 lakh	4 lakh

(c) Category: Blind-Sports

S.No.	Name of Event	Amount of Award Money (in Rupees)		
		Gold Medal	Silver Medal	Bronze Medal
1	IBSA World Championship	10 lakh	7 lakh	4 lakh

(d) Category: Sports for Deaf

S.No.	Name of Event	Amount of Award Money (in Rupees)		
		Gold Medal	Silver Medal	Bronze Medal
1	Deaflympics	15 lakh	10 lakh	5 lakh

(e) Category: Specail Olympics-Sports

S.No.	Name of Event	Amount of Award Money (in Rupees)		
		Gold Medal	Silver Medal	Bronze Medal
1	Special Olympics (Summer/Winter)	5 lakh	3 lakh	1 lakh

(f) Category: Blind Cricket World Cup

S.No.	Name of Event	Amount of Award Money (in Rupees)

1	Blind Cricket World Cup (held in 4 years)	5 lakh

Cash award is also given to coaches who have trained the medal winners for at least 180 days immediately preceding the tournament. Award money to a coach is 50 per cent of the award money given to the sportsperson coached. In case, there is more than one coach, the award money is distributed among them equally.

Scheme of Pension to Meritorious Sportspersons

This Scheme was launched in 1994. As per the Scheme, those sportspersons, who are Indian citizens and have won gold, silver and bronze medals in Olympic Games, World Cup/World Championships, Asian Games, Commonwealth Games, Para-Olympics and Para-Asian Games, have attained the age of 30 years and have retired from active sports career are eligible for pension for life. Rates of pension have been doubled from April 2018. Enhanced rates of pension are as under:

S.No.	Category of Meritorious Sportspersons	Rate of Pension (₹/per month)
1	Medallists at the Olympic Games/Para Olympic Games	20,000
2	Gold medallists at the World Cup/World Championship* in Olympic and Asian Games disciplines	16,000
3	Silver and Bronze medallists at the World Cup in Olympic and Asian Games disciplines	14,000
4	Gold medallists of the Asian/Commonwealth Games/Para Asian Games	14,000
5	Silver and Bronze medallists of the Asian/Commonwealth Games/ Para Asian Games	12,000

* *World Cup/World Championship held once in four years only shall be considered.*

Pandit Deendayal Upadhyay National Welfare Fund

The name of National Welfare Fund for sportspersons was changed to Pandit Deendayal Upadhyay National Welfare Fund for sportspersons

from 2017. This Fund was set up in 1982 with a view to assisting outstanding sportspersons of yesteryears, living in indigent circumstances who had won glory for the country in sports. Assistance is given in the form of lumpsum financial assistance to, sportspersons or their families in case of sustaining a fatal injury during training for, or participation in, an international competition; sportspersons sustaining injury other than a fatal injury; families of sportspersons living in indigent circumstances, for medical treatment of sportspersons; and for sports promoters (referees, coaches and umpires) living in indigent circumstances. Assistance is provided to those whose monthly income from all sources is less than ₹ 2,00,000 per annum.

Scheme of Assistance for Anti-Doping Activities

Doping is the deliberate or inadvertent use of a substance or method banned by Medical Commission of International Olympic Committee/ World Anti Doping Agency (WADA) by sportspersons. In pursuit of gold and glory, large number of sportspersons all over the world are tempted to use performance enhancing substances in an effort to gain a competitive edge over others. India is no exception to this malaise. Recognising the urgent need for embarking upon a concerted effort to check doping in collaboration with the global anti-doping community, the Government of India became one of the members of the Foundation Board of WADA, set up with the initiative of the International Olympic Committee.

National Anti Doping Agency

National Anti Doping Agency (NADA), set up in 2009, is the national organisation responsible for promoting, coordinating, and monitoring the doping control programme in sports in the country. The Anti Doping rules of NADA are compliant with the Anti Doping Code of WADA.

National Dope Testing Laboratory

The National Dope Testing Laboratory (NDTL) is an autonomous body under this Ministry. It is accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for ISO:IEC 1 7025 (2003) and World Anti-Doping Agency (WADA) (September 2008)

for testing of urine and blood samples from human sports. NDTL is one of the 33 WADA accredited laboratories in the world and one among seven in Asia. It has state-of-the-art facilities for both routine and research activities. NDTL was registered in 2008 under Registration of Society Act, 1860. Apart from human dope testing, NDTL has diversified in the area of horse dope testing and proficiency testing programme.

30 States and Union Territories

Andhra Pradesh

Area :	1,60,205 sq. km	*Population*	: 4.9 crore (as per prov. census 2011)
Capital :	Amaravati	*Principal Languages*	: Telugu, Urdu, Hindi, Banjara

THE earliest mention of the Andhras is said to be in *Aitereya Brahmana* (2000 BC). It indicates that the Andhras, originally an Aryan race living in north India, migrated to south of the Vindhyas and later mixed with non-Aryans. Regular history *of Andhra Desa,* according to historians, begins with 236 BC, the year of Ashoka's death. During the following centuries, *Satavahanas, Sakas, Ikshvakus,* Eastern *Chalukyas,* and *Kakatiyas* ruled the Telugu country. Other dynasties that ruled over the area in succession were the kingdoms of Vijayanagar and Qutub Shahi followed by Mir Qumruddin and his successors, known as the Nizams. Gradually, from the 17th century onwards, the British annexed territories of the Nizam and constituted the single province of Madras. After Independence, Telugu-speaking areas were separated from the composite Madras Presidency and a new Andhra State came into being on October 1, 1953. With the passing of the States Reorganisation Act, 1956, there was a merger of Hyderabad State and Andhra State, and consequently Andhra Pradesh came into being on November 1,1956.

Andhra Pradesh is situated on the country's south-eastern coast. It is the eighth largest state in the country covering an area of 1,60,205 sq. km. According to 2011 census, the state is tenth largest by population, with 4,93,86,799 inhabitants.

The state has the second longest coastline of 974 km (605 mi) among all the states of India, second only to Gujarat. It borders Telangana in the northwest, Chhattisgarh in the north, Odisha in the north-east, Karnataka

in the west, Tamil Nadu in the south and water body of Bay of Bengal in the east. A small enclave of 30 sq.km of a district of Puducherry, lies in the Godavari delta to the north-east of the state.

Andhra Pradesh Reorganisation Act, 2014

Andhra Pradesh Reorganisation Act, 2014, commonly called Telangana Act is an Act of Indian Parliament proclaiming the bifurcation of the Andhra Pradesh into two states, Telangana and residuary Andhra Pradesh. The Act consists of all aspects of division of assets and liabilities, and finalise the boundaries of the proposed new states and status of Hyderabad.

Agriculture

Agriculture and allied sectors support more than 60 per cent of population in the state. Rice is a major food crop and staple food contributing a large chunk of the foodgrain production. Other important crops are jowar, bajra, maize, ragi, small millets, pulses, castor, tobacco, cotton and sugarcane. As per the third advance estimates for the year 2019-20, the area and production of foodgrains has increased over the previous years. In the recent years, the focus has shifted from production to processing, packaging and marketing through a strengthened supply chain to facilitate farmers. Forests cover 23 per cent of the state's area. Important forest products are teak, eucalyptus, cashew, casuarina, bamboo and softwood.

Irrigation

Irrigation projects taken up under Jalayagnam Programme are under progress and programmed to be completed for providing irrigation to cultivable lands, drinking water and industrial water. About 105.66 lakh acres of irrigation potential has been created in the state up to March 2020 under major anicuts on Krishna, Godavari and Pennar rivers, projects like Nagarjuna Sagar, Telugu Ganga, Somasila, Srisailam Right Bank Canal (SRBC), Vamsadhara, medium irrigation projects and minor irrigation schemes. Andhra Pradesh has brought 1.95 lakhs ha of area under micro-irrigation which is third highest in the country.

Power

State government has given top priority for promotion of renewable energy power projects in particular solar power projects in line with the

policies of the Ministry of New and Renewable Energy. The cumulative renewable energy capacity installed in the state is 8,193.768 MW. It includes 3,521.99 MW from solar power projects, 4,079.37 from wind power projects, 102.59 MW from smalI hydro power projects and 489.81 MW from bio-mass, bagasee, municipal and industrial waste power projects.

Industries

The state government is extending various incentives for small and tiny sector and large and medium scale industries. During 2019-20, 44 large and mega industrial projects were established with an investment of ₹ 22,282.16 crores providing employment to many.

Mines and Geology

Andhra Pradesh is well-known globally for variety of rocks and minerals and is called Ratna Garbha. Minerals form a major contributor to the economic growth of the state. Minerals like crude oil and natural gas, barytes, bauxite, copper ore, asbestos, manganese, mica, coal, limestone, black and colour granites are found in the state. The state has a mineral policy which aims to translate the state's mineral potential into reality with eco-friendly and sustainable mining.

The state mineral and mining sector contributed ₹ 18,837.75 crore from mineral revenue to the state exchequer during 2019-20.

Information Technology

The state government has identified four cities of Visakhapatnam, Amaravati, Anantapur and Tirupati as major technology hubs. The ITE&C department has been successful in engaging with 343 leads with committed investment of ₹ 49,347.58 cr. and committed 21,81,207 jobs across the state.

Transport

Roads: The total R&B road network (excluding NH roads) in the state in 2019-2020 was 46,211.69 kms comprising 13,500.445 kms of state highways, 32,711.245 kms of major district road and rural roads. There are 36 National Highways in the state covering a length of 6,859.66 km.

Railways: Of the railways route covering 5,107 km in Andhra Pradesh, 4,633 km is broad-gauge, 437 km is metre-gauge and 37 km is narrow

gauge.

Aviation: Important airports in the state are located at Shamshabad, Tirupathi and Visakhapatnam. International flights are operated from Shamshabad.

Ports: There is one major port at Visakhapatnam under the central government and 14 notified ports under state government. Ports offer tremendous potential for development and for the growth of a wide spectrum of maritime activities such as international shipping, coastal shipping, ship repairs, fishing, captive ports for specific industries, all-weather ports, tourism and sports.

Tourist Centres

Andhra Pradesh Tourism Development Corporation continues to strive for promotion of new tourism products such as eco-tourism, beach-tourism and cruise-tourism. The Corporation currently runs a chain of 52 hotels with 1,043 rooms and 2,222 beds in prime locations fostering homely ambience. An impressive fleet of 144 buses cater to varied tour packages connecting important tourism locations within and outside the state.

Charminar, Salarjung Museum, Golconda Fort in Hyderabad, Thousand Pillar Temple and Fort in Warangal, Sri Lakshmi Narasimha Swamy Temple at Yadagirigutta, Buddha Stupa at Nagarjunakonda, Nagarjuna Sagar, Sri Venkateswara Temple at Tirumala-Tirupathi, Sri Mallikarjunaswamy Temple at Srisailam, Kanaka Durga Temple at Vijayawada, Sri Satyanarayana Swamy Temple at Annavaram, Sri Varaha Narasimha Swamy Temple at Simhachalam, Sri Sita Rama Temple at Bhadrachalam, Araku Valley, Horsley Hills, Nelapattu, etc., are the major tourist attractions of the state.

Website : www.ap.gov.in

Government

Governor	: Biswabhusan Harichandan	*Chief Secretary*	: Nilam Sawhney
Chief Minister	: Y. S. Jagan Mohan Reddy	*Jurisdiction of High Court*	: Andhra Pradesh

Arunachal Pradesh

Area	: 83,743 sq. km	*Population*	13.84 lakh (as per prov. census 2011)
Capital	: Itanagar	*Principal Languages*	: Nyishi, Adi, Bengali, Nepali, Hindi, Mohpa, Assamese, Wancho, Tangsa, Mishmi, Mishing, Nocte, etc.

History and Geography

Arunachal Pradesh became a full-fledged state on February 20, 1987. Till 1972, it was known as the North-East Frontier Agency (NEFA). It gained the Union Territory status on January 20, 1972 and was renamed as Arunachal Pradesh. On August 15, 1975, an elected Legislative Assembly was constituted and the first Council of Ministers assumed office. The first general election to the Assembly was held in February 1978. Administratively, the state is divided into 16 districts. The capital of the state is Itanagar in Papum Pare district. Itanagar is named after Ita fort, meaning fort of bricks, built in the 14th century AD. Arunachal Pradesh finds mention in the literature of *Kalika Purana* and *Mahabharata.* This place is the Prabhu Mountains of the *Puranas.*

The widely scattered archaeological remains at different places in Arunachal Pradesh bear testimony to its rich cultural heritage.

Agriculture and Horticulture

Arunachal Pradesh is basically an agricultural state. About 68 per cent of the total working population is engaged in agricultural and other related activities. With very few exceptions, they practice 'jhum' (shifting cultivation) on the hill slopes, the practice that is rooted in their culture and tradition. The secondary sector accounts for 6.66 per cent of the total working population. Forests play a significant role in the ecology, economy and socio-cultural life of the tribes. It is the primary source of natural wealth of the state. Forest covers account for 80.99 per cent of total area of the territory spreading over 51,540 sq. km. The landscape and forests vary with changing altitude, which comprises alpine forests, temperate and sub-tropical forests, and semi-evergreen forests.

Industries and Minerals

For conservation and exploration of the vast minerals, the Arunachal Pradesh Mineral Development and Trading Corporation Limited (APMDTCL) was set up in 1991.

Festivals

Some of the important festivals of the state are *Mopin* and *Solung* of the Adis, *Lossar* of the Monpas, *Boon-boot* of the Hill Miris, *Sherdukpens, Dree* of the Apatanis, *Si-Donyi* of the Tagins, *Reh* of the Idu-Mishmis, *Nyokum* of the Nyishis, etc. Animal sacrifice is a common ritual in most festivals.

Tourist Centres

Places of tourist interest are Tawang, Dirang, Bomdila, Tipi, Itanagar, Malinithan, Likabali, Pasighat, Along, Tezu, Miao, Roing, Daporijo Namdapha, Bhismaknagar, Parshuram Kund and Khonsa.

Website: www.arunachalpradesh.gov.in

Government

Governor :	Brig. Dr. B.D. Mishra (Retd.)	*Chief Secretary :*	Naresh Kumar
Chief Minister	: Pema Khandu	*Jurisdiction of : High Court*	Falls under Gauhati High Court

Assam

Area	: 78,438 sq. km	*Population*	: 3.12 crore (census 2011)
Capital	: Dispur	*Principal Language*	: Asamiya, Bodo

History and Geography

Assam is situated in the north-east corner of the country between 89° 42’ E to 96° E longitude and 24° 8’ N to 28° 2’ N latitude. For centuries, people and communities have been attracted to the fertile environs of Assam and its abundant natural resources. Streams of people have met and mingled, cultures and customs have merged and in this process a rich and composite culture has been evolved.

The state also known as a “Land of Red River and Blue Hills”, is one of the most attractive and beautiful states of the country. The mighty river Brahmaputra flows through it, serving as a lifeline for its people

settled on both sides of its banks. The word ’Assam’ is believed to have derived from the Sanskrit word ’Asoma’ meaning peerless or unparalleled. Another academic interpretation claims that the word came from the Ahoms, who ruled the land for about 600 years prior to its annexation by the British. The influence of several races like Austric, Mongolian, Dravidian and Aryan that came to this land long ago, have contributed to its rich composite culture.

Assam was known as Pragjyotisha or the place of eastern astronomy during the epic period and later named as Kamrupa. The earlier epigraphic reference to the kingdom of Kamrupa is found in the Allahabad pillar inscription of King Samudragupta. Kamrupa is mentioned as a *pratyanta* or frontier state outside the Gupta Empire, but with friendly and subordinate relation to it. Hiuen Tsang, the Chinese scholar pilgrim who visited Kamrupa in about 743 AD on an invitation of its monarch, Kumar Bhaskar Varman, left a record of the kingdom he called Kamolupa. Kamrupa also figured in the writings of the Arabian historian Alberuni in the eleventh century. Thus, from the epic period down to the twelfth century AD, the eastern frontier kingdom was known as Pragjyotisha and Kamrupa and kings called themselves ’Lords of Pragjyotisha’.

The advent of the Ahoms across the eastern hills in 1228 AD was the turning point in Assam history. They ruled Assam nearly for six centuries. The Burmese entered through the eastern borders and over-ran the territory at a time when court intrigues and dissensions were sapping the vitality of the Ahom royalty. It became a British protectorate in 1826 when the Burmese ceded Assam to the British under the provision of the Treaty of Yandaboo.

Assam covers an area of 78,438 sq. km, which represents 2.39 per cent of the total land area of the country. International boundaries that extend up to nearly 3,200 km, surround the state. Assam, the gateway to the north-eastern states, is surrounded by Bhutan and Arunachal Pradesh on the north; Manipur, Nagaland and Arunachal Pradesh on the east; Meghalaya, Tripura and Mizoram on the south; and Bangladesh, Meghalaya and West Bengal on the west.

Physiography

A significant geographical aspect of Assam is that it contains three of six physiographic divisions of India—the Northern Himalayas (eastern Hills), the Northern Plains (Brahmaputra Plain), and Deccan Plateau (Karbi Anglong). As the Brahmaputra flows in Assam, the climate here is cold and there is widespread rainfall. The hills of Karbi Anglong, North Cachar and those in and close to Guwahati (also Khasi-Garo Hills) now eroded and dissected are originally parts of the South Indian Plateau system. In the south, the Barak originating in the Barail Range (Assam-Nagaland border) flows through the Cachar district with a 25-30 miles (40-50 km) wide valley and enters Bangladesh with the name Surma river. The almond shaped valley is built mostly by aggregation work of the Brahmaputra and its tributaries. Most of the prominent towns and cities of Assam are situated in this valley whose length and breadth are 725 kms and 80-100 kms respectively. Running through a narrow passage at the Meghalaya plateau and Bhutan-Arunachal-Himalayas, the valley finally opens out into the North Bengal Plains.

The second natural division of Assam is the Barak or Surma valley which is surrounded by North Cachar, Manipur and Mizoram. This valley is dominated by the Barak river. It flows through the valley and finally empties itself to the old bed of Brahmaputra in Bangladesh. This valley has hills and 'Beels' or lakes in plenty. Flood is a common feature lending the quality of fertility to the valley.

The two valleys are separated by long range of hills. The Karbi Hills and the N.C. Hills are located in the south of the Brahmaputra valley. Karbi Hills are a part of the Meghalaya plateau. These hills are dotted with plain areas. The average height of this plateau is 600 metres with occasional peaks like Chenghehision (1,359 m) and Dunbukso (1,361 m). Greenery is the hallmark of these hills, slowly reaching their full height towards the middle of the Dima Hasao district, merging with the Barail range, which is the highest hill range in Assam. The elevation of the Barail range varies from 1,000 to 1,200 metres above sea level. The south side of the Barail range is very steep. It attains a maximum height of 1,953 metres in Mahadeo peak to the east of Haflong. This valley is full of dense forest and rare wildlife.

Economy

The state finances have improved considerably over the years with industry and businesses picking up.

Agriculture

Assam is endowed with abundant fertile land and water resources with a total geographical area of 78,438 sq. km. The mighty river Brahmaputra and the Barak with their 121 small and tiny tributaries and branches flow through the two valleys keeping the state fertile and cool all along.

Assam has achieved 40 per cent increase in the contribution of agriculture to state GDP. Rice production has increased to 54.40 lakh MT. Likewise, production of foodgrains has also increased from 41.72 lakh MT to 57.22 lakh MT.

Forest & Wildlife

Assam has 29,282 sq. km area of forest and tree cover which covers 37.33 per cent of total geographical area of the state. It has 13,870 sq. km of Reserved Forests; 3,103 sq. km. of Proposed Reserved Forests; 5,850 sq. km of Unclassed State forests; and 3,925 sq. km of Protected Area Network (Source: FSI Data-2009 and "Assam 2011", page-152).

About 180 species of mammals are found in the state which includes globally threatened species such as Golden Langoor, Hoolock Gibbon, Pigmy Hog, Hispid Hare, White-winged Wood Duck, Tiger, Clouded Leopard, Elephant, Swamp Deer, Gangetic Dolphin, etc. More than 800 species of birds and about 195 species of reptiles are found in the state. Strong enforcement of wildlife conservation measures have resulted increase in the tiger population of the state. The tiger population rose to 190 in 2018 from 143 during 2010-11. The rhino population in the state stands at 2,650 as per 2018 census. Efforts are also being taken to provide sustainable livelihood to the forest communities.

Industry

Today's Assam embarks on the new charter in the path of development, laying emphasis on new capital formation through the creation of ecologically compliant assets in a sustainable manner. Loans are extended for small industries and service sector under PMRY scheme (till 2008).

Power

The state's power generation capacity as well as per capita availablity of electricity has increased over the years. This has become possible due to timely execution of renovation and modernisation works in all areas of power generation, distribution and transmission.

Transport & Communication

The state government has been placing great priority on expanding and improving the rural road network and construction of RCC bridges by replacing old timber bridges. More than 23,000 km of all-weather roads and about 3,800 RCC bridges have been constructed. Moreover, construction of about 5,000 km all-weather roads including construction of 1,250 numbers of RCC bridges is in progress.

Festivals

Assam, being an inseparable part of this great country, shares all the religious festivals observed elsewhere. The state also has an exclusive range of festivals which have enriched the cultural mosaic of the land. *Bihu* is by far the most important festival of Assam. While *Rongali Bihu or Bohag Bihu,* coinciding with the Assamese New Year, is the principal *Bihu,* the harvest festival, known as the *Bhogali Bihu* or *Magh Bihu* is also equally important. There is a third *Bihu* called the *Kangali Bihu* or *Kati Bihu,* which is solemnly observed for love and yearning, sometimes having distinct erotic overtones, with characteristically catchy and earthy tunes. The Bodos, the largest tribal group, perform *Kherai* puja as a festival, which assumes the shape of a fair in most places. The *Kherai puja* is accompanied by shamanistic dance performed by female artists who get into a trance, other with vigorous movements of the head, tossing and swinging the dishevelled hair. *Bathow* is another important puja of the Bodos.

Tourism

Over the years, Assam, the "Gateway of the North-East" has emerged as a popular tourist destination. The natural beauty and bounty, the environment, rich topography, the unique flora and fauna, the biodiversity, virgin forest, proud hills and green valleys all contribute in making Assam a major hub for wildlife and eco-tourism. Assam is located about 79.5 m above sea level. The five national parks, 19 wildlife sanctuaries and three bird sanctuaries are treasure houses of rare flora and fauna.

Important places of tourism are Kamakhya Temple, Umananda (Peacock Island) Temple, Navagraha (temple of nine planets), Basistha Ashram, Doul Govinda Temple, State Zoo, State Museum, Madan Kamdev Temple—a magnificent archeological place of interest, Saraighat Bridge, Srimata Sankaradeva Kalakshetra Science Museum, Kaziranga National Park, etc.

Website : www.assam.gov.in

Government

Governor	: Prof. Jagdish Mukhi	*Chief Secretary*	: Jishnu Barua
Chief Minister	: Sarbananda Sonowal	*Jurisdiction of High Court*	: Assam, Nagaland, Mizoram an Arunachal Pradesh

Bihar

Area	: 94,163 sq. km	*Population*	: 10.41 crore (2011 census)
Capital	: Patna	*Principal Language*	: Hindi, Bhojpuri, Maithili

History and Geography

The name 'Bihar is' derived from the Sanskrit word 'Vihara' which means "abode". The word Vihar is itself derived from the word Brahmavihara meaning "Brahma abidings" of "Sublime attitudes". The state finds mention in the *Vedas, Puranas,* ancient epics, etc., and was the main scene of activities of Buddha and 24 Jain Trithankars. Taking off from its origin, Bihar or ancient Magadha has been the cradle of Indian civilisation and the centre of Indian culture and education since time immermorial. From Magadha arose India's first greatest empire, the Maurya Empire, as well as one of the world's greatest pacifist religions, Buddhism. It has also been the home to Jainism. It was in Bihar that the ancient universities of India Nalanda and Vikramshila were built to convey the educational riches of the state.

Great rulers of the state before the Christian era were Bimbisar, Udayin, who founded the city of Pataliputra, Chandragupta Maurya and Emperor Ashoka, the Sungas and the Kanvas. Then came the Kushan rulers followed by Chandragupta Vikramaditya of the Gupta dynasty.

Muslim rulers made inroads into the territory during the medieval period. The first conqueror of Bihar was Mohammed-bin-Bakhtiar Khalji. The Tughluqs and then the Mughals followed the Khaljis.

One of the major states of the Indian Union, Bihar is bound on the north by Nepal, on the east by West Bengal, on the west by Uttar Pradesh and on the south by Jharkhand. Bihar has a number of rivers, the most important of which is the Ganga. The other rivers are the Sone, Punpun, Falgu, Karmanasa, Durgawati, Kosi, Gandak, Ghaghara, etc.

Agriculture

Bihar has a total geographical area of about 93.60 lakh hectares, out of which only 55.54 lakh hectares is the net cultivated area with a gross cultivated area of 72.95 lakh hectares. The principal food crops are paddy, wheat, maize and pulses. Main cash crops are sugarcane, potato, tobacco, oilseeds, onion, chillies, jute and mesta. Bihar has a notified forest area of 6.22 lakh hectare, which is 6.65 per cent of its geographical area.

The Bihar State Organic Mission is being implemented in 12 districts (Patna, Buxar, Bhojpur, Nalanda, Vaishali, Saran, Samastipur, Begusarai, Lakhisarai, Khagaria, Bhagalpur and Munger) with a total approved sum of ₹ 15,588.58 lakh for the period 2019-20 to 2021 -22. The main objectives of the scheme is to promote organic farming in the state, protect the environment, soil and water resources from pollution and make farming sustainable.

Irrigation

The total irrigation potential created from major and medium irrigation projects during 2018-19 stood around 30.04 lakh hectares, while it was 42.03 lakh hectares from minor irrigation projects. In 2018-19, initiatives included the Western Gandak Canal system, Eastern Kosi Canal System, Eastern Sone High Level Canal, Chausa Pump Canal scheme, etc. The total irrigation potential restored under these schemes was 234.05 thousand hectares. New irrigation potential was created by executing schemes, such as Durgawati Reservoir Scheme, Kundhghat Reservoir Scheme, Sendhwa Check Dam in Jehanabad district, Weir on Panchane river in Nalanda district, Drainage and Irrigation Scheme of Danwar Lake, Western Gandak Canal System and Lavaichh Rampur

Barrage. The total irrigation potential created under these schemes in 2018-19 was 12.75 thousand hectares.

Festivals

Festivals are the nerves of any Indian society, spread in each and every part of its body system. Bihar is no exception. Almost all the important festivals celebrated at the national level like Durga Puja, Deepawali, Janmastami, Holi, Id, Christmas, etc., have a strong bond with Bihar's cultural and social life. Besides, there are certain peculiar and important festivals which define the social fabric of this state which include *Chhath Pooja,* also called *Chhathi Dala Chhath* and *Surya Shashthi,* 'Sama Chakeba', the *Harihar Mela* of Sonepur, etc.

Tourism

A state with so much of history and knowledge has its share of places of tourist interest. Bihar attracts hordes of tourists not just of the country but abroad as well. Prominent places of interest include: Patna, Bodh Gaya, Gaya, Rajgir, Sitamarhi — the birth place of Sita, Barabar Caves, Kesaria Stupa, 100 feet tall Dev Sun Temple of Aurangabad, Jain temples, Buddlist Stupas to name the prominent ones.

Website : www.state.bihar.gov.in

Government

Governor :	Phagu Chauhan	*Chief Secretary :*	Deepak Kumar
Chief Minister :	Nitish Kumar	*Jurisdiction of High Court :*	Bihar

Chhattisgarh

Area	: 1,35,192 sq. km	*Population*	: 2.56 crore (census 2011)
Capital	: Raipur	*Principal Language :*	Hindi

History and Geography

Chhattisgarh, carved out of Madhya Pradesh, came into being in November 2000 as the 26th state of the Union. It fulfils the long-cherished demand of the people. In ancient times the region was known as Dakshin-Kausal. This finds mention in *Ramayana* and *Mahabharata*

also. Between the 6th and 12th centuries Sarabhpurias, Panduavanshi, Somvanshi, Kalchuri and Nagvanshi rulers dominated this region. Kalchuris ruled in Chhattisgarh from 980 to 1791 AD. With the advent of the British in 1845, Raipur gained prominence instead of capital Ratanpur. In 1904, Sambalpur was transferred to Odisha and estates of Sarguja were transferred from Bengal to Chhattisgarh.

Chhattisgarh is bounded by southern Jharkhand and Odisha in the east; Madhya Pradesh and Maharashtra in the west; Uttar Pradesh and western Jharkhand in the north; and Andhra Pradesh in the south. Area-wise, Chhattisgarh is the ninth largest state and population-wise it is 17th populous state of the nation.

Agriculture

The total population of the state is around 2.55 crore, of which about 70 per cent is engaged in agriculture. There are around 37.46 lakh farm families in the state, with about 80 per cent farmers falling under small and marginal category. Paddy, soybean, urd and arhar are the major kharif crops while rabi season is mainly led by chickpea and lathyrus. Some districts of the state have good potential for sugarcane crop with four co-operative sugar factories running successfully. Other crops are maize, millets, moong, wheat and groundnut. Central plains of Chhattisgarh is known as Rice Bowl of central India.

The agro climate zones of Chhattisgarh are three, viz., Northern Hill Zone, Chhattisgarh Plain and Plateau of Bastar. The average annual rainfall of this area is about 1,307.3 mm.

Irrigation and Power

The state has 20.99 lakh hectares of irrigated area under major, medium and minor irrigation schemes. Eight major, 37 medium, around 2,395 minor irrigation schemes and 30 tubewell and 718 stop dams are being constructed.

Mineral Resources

Chhattisgarh has the perfect geological set up to host a number of economically crucial minerals. Large deposits of coal, iron ore, limestone, bauxite and dolomite are found in various parts of the state. Districts of north Chhattisgarh such as Surguja, Raigarh, Koriya and Bilaspur are known for huge coal deposits.

Industry

The economy is largely natural resource driven and it leverages the state's rich mineral resources. The key sectors where Chhattisgarh has a competitive advantage include cement, mining, steel, aluminium and power. One of the most mineral-rich states in India, Chhattisgarh provides a lucrative opportunity for cement production at the most competitive prices.

Transport

Roads: The total length of the roads in the state under PWD is 31,803 km. The length of national highway is 2,226 km; state highways 5,240 km; main district roads 10,539.80 km and 13,798 km other district and rural roads. The length of roads in Chhattisgarh has increased from 17.75 km to 21.40 km per 100 km.

Railways: Raipur, Bilaspur, Durg, Rajnandgaon, Raigarh and Korba are important railway stations.

Tourist Centres

Chhattisgarh, situated in the heart of India, is endowed with a rich cultural heritage and attractive natural diversity. The state is full of ancient monuments, rare wildlife species, carved temples, Buddhist sites, palaces, waterfalls, caves, rock paintings and geographical formations.

Website : www.cgstate.gov.in

Government

Governor	: Anusuiya Uikey	*Chief Secretary*	: Amitabh Jain
Chief Minister	: Bhupesh Baghel	*Jurisdiction of High Court*	: Chhattisgarh

Goa

Area	: 3,702 sq. km	*Population*	: 14.59 lakh (prov. census 2011)
Capital	: Panaji	*Principal Languages*	: Konkani (Official Language); other languages: Marathi, Hindi, English, Kannada

History and Geography

Goa, known in the bygone days as Gomanchala, Gopakapattam, Gopakapuri, Govapuri, Gomantak, etc., abounds in a rich historical heritage. Early history of Goa is obscure. In the first century of the Christian era, it was a part of the Satavahana empire, followed by the Kadamba, the Rashtrakutas of Malkhed, the Chalukyas and the Silharas. The empire of the Yadavas by the end of the 14th century was displaced by the Khiljis of Delhi and thus Muslim rule came to Goa. After the discovery of the sea route to India by Vasco-da-Gama in 1498, many Portuguese expeditions came to India. In 1510, Alfonso de Albuquerque with the help of the emperor of Vijayanagar attacked and captured Goa. With the arrival of the Jesuit priest Francis Xavier in 1542, proselytisation began in Goa. However, the Portuguese continued to rule over the territory except for an interlude during the latter half of the 17th century when Shivaji conquered a few areas in and around Goa.

Even after India's independence, Goa continued to be in the hands of the Portuguese. However, they could not fulfil the aspirations of the Goan people and ultimately on December 19,1961, Goa was liberated and made a composite union territory with Daman and Diu. In May 1987, Goa was conferred statehood and Daman and Diu was made a separate union territory. It is situated on the western coast of the Indian peninsula. On its north runs the Terekhol river which separates Goa from Maharashtra and on the south lies north Canara district of Karnataka. On the east lie the Western Ghats and in the west the Arabian Sea. Panaji, Margao, Vasco, Mapusa and Ponda are the main towns of Goa.

Agriculture

The total cultivated area of the state is 1,46,540 hectares while the total production is 3,37,463 tonnes. A subsidy of up to 90 per cent is also provided for construction of polyhouses and green houses. Similar subsidies are provided for drip irrigation and for construction of biogas plants.

Water Resources

The Water Resources Department apart from supplying raw water for irrigation has also augmented raw water supply to the PWD. The Department has augmented the capacity of Amthane Dam by 100 MLD through pumping station installed at village Sal on Chapora river. For uninterrupted raw water supply of 100 to 130 MLD to Assnora water

treatment plant, during stoppage/ shortage of Tillari water, the state government has put in various plans.

Industries

All schemes under the State Industrial Policy as well as the State Biotech Policy will continue to be in force and are to be popularised further. To provide encouragement to artisans of Goan handicrafts, it is proposed to develop Goa Haat-cum-shilpagram, new emporia in Goa and outside Goa and develop an e-portal for the sale of handicraft items across the globe.

Transport

Roads: Of the motorable roads, national highway constitutes 293 km, state highways 279 km and other roads MDR/RR/4,501.18 km.

Railways : Goa is linked with Mumbai, Mangalore and Thiruvananthapuram through the Konkan Railway, which has introduced several fast trains on these lines. Vasco da Gama is connected with Bengaluru and Belgaum on the South Central Railway, presently for goods traffic only.

Aviation : Mumbai, Delhi, Thiruvananthapuram, Cochin, Chennai, Agati and Bengaluru are linked with Dabolim through regular airline services.

Ports : Mormugao is the major port in the state which handles cargo vessels. Minor ports are located at Panaji, Tiracol, Chapora, Betul and Talpona, out of which Panaji is the main operative port. One off-shore berth at Panaji has also been commissioned.

Tourist Centres

Important tourist centres are Colva, Calangute, Vagator, Baga, Harmal, Anjuna and Miramar beaches; Basilica of Bom Jesus and St. Cathedral churches at Old Goa; Kavlem, Mardol, Mangeshi, Bandora Temples; Aguada, Terekhol, Chapora and Cabo de Rama Forts; Dudhsagar and Harvalem waterfalls and Mayem lake resort. The state has rich wildlife sanctuaries, viz., Bondla, Cotigao, Molem and Dr Salim Ali Bird Sanctuary at Chorao covering an area of 354 sq. km.

Forest

Goa has a good forest cover of 34.63 per cent against the national requirement of 33 per cent and nearly 65 per cent of tree cover.

Health

Goa became the first state in the country to launch diabetic registry. The new district hospitals at Margao, Mapusa and the new 170-bedded ID hospital at Ponda are important hospitals.

Website : www.goa.gov.in

Government

Governor	: Bhagat Singh Koshyari	*Chief Secretary*	: Parimal Rai
Chief Minister	: Pramod Sawant	*Jurisdiction of High Court*	: Panaji Bench of Bombay High Court

Gujarat

Area	: 1,96,024 sq. km	*Population*	: 60,439,692 (prov. census 2011)
Capital	: Gandhinagar	*Principal Language*	: Gujarati

History and Geography

The history of Gujarat goes back to 2000 BC. It is believed that Lord Krishna left Mathura to settle in the west coast of Saurashtra, which later came to be known as Dwarka. Later, it witnessed various kingdoms as Mauryas, Guptas and others. It was during the rule of Chalukyas (Solankis) that Gujarat witnessed progress and prosperity. In spite of the plundering of Mahmud Ghazni, the Chalukya kings were able to maintain general prosperity and well-being. After this glorious respite, Gujarat faced troubled times under the Muslims, Marathas and the British rule. Before independence, the present territories of Gujarat used to be in two parts—the British and the Princely territories. With the reorganisation of the states, the Union of the States of Saurashtra and the Union Territory of Kachchh along with the former British Gujarat became a part of the biggest bilingual State of Bombay. Gujarat was officially formed as a state in May 1960. It is situated on the west coast of India. The state is bounded by the Arabian Sea on the west, Pakistan and Rajasthan in the north and north-east respectively, Madhya Pradesh in the south-east and Maharashtra in the south.

Agriculture

Gujarat has diversified its agricultural economy. The state is divided into eight sub agro-climatic zones based on the characteristics of agriculture and climate. Agriculture is one of the major sector for transforming economy of the state. 'Pradhan Mantri Kisan Sanman Yojana', agriculture aid packages, procurement with minimum support price, electricity subsidy, fertiliser subsidy and crop insurance and other agriculture support schemes have developed this sector. State shares 5 per cent of country's population and 19.5 per cent of national agriculture production. The state harvests cotton, groundnut, rice, bajara, maize as kharif crops and wheat, gram, mustard, cumin as rabi crops. Gujarat stands first in cotton and groundnut production with 31.05 per cent and 42.55 per cent share. There are 224 Agriculture Produce Market Committees (APMCs), 214 main yards of marketing committees and 183 sub market yards operational in 33 districts of the state. To provide economical strength to farmers, Gujarat has purchased 32 lakh tonne agricultural production of ₹ 15,900 crore at minimum support price from 38 lakh farmers.

Horticulture crops are major contributors in the state's agriculture production. The major vegetables grown in the state are onion, potato, brinjal, tomato, okra and cucurbits. The state also produces spices, viz., cumin, fennel and garlic. The state is leading in production of onion, tomato, banana, potato and pomegranate at national level. The state has also introduced new horticulture crops like cashew nut, pamarosa, sweet orange and other medicinal crops. Onion dehydration industry of the state is the biggest in the country. Moreover, the state enjoys monopoly in the processing of *Isabgul.*

Animal husbandry and dairy industry play a vital role in generation of substantial income in the rural economy. The state government provides animal healthcare services up to the village level through the network of veterinary institutions. Gujarat is located on western coast of India and covers about one fifth part of the country's coastline. It contributes 20 per cent of the country's total marine production.

State gained momentum in overall agriculture production with its share of 11.3 per cent oil seeds production, 42.6 per cent groundnut

production, 31.1 per cent cotton production, 7.3 per cent horticulture crop production, 7.7 per cent milk production to all India during 2017-18.

Irrigation

The state is working with an objective to harness the water resources optimally for the benefit of the people. Nearly 6 lakh water harvesting structures depending upon soils, topography and availability of water have been put up in the state. Due attention has been given to accelerate the pace of water resources development to increase the net water availability by creating additional storage; completion of ongoing projects; improvement in water use efficiency; bridging the gap between the irrigation potential created and its utilisation; restoration and modernisation of existing irrigation system; conjunctive use of ground and surface water; promoting participatory irrigation management; large-scale people's participation in water conservation programme and inter-basin transfer of water.

In north Gujarat and other areas of the state, deepening of existing ponds/ tanks is being done. Under Sujalam Sufalam Jal Abhiyan 2019, deepening of 4,562 tanks has been completed. To utilise the additional flood water of Narmada river in north Gujarat region, 11 works of lift irrigation system have been completed. To prevent salinity ingress in Kutch region, 55 bandhara works have been done under Sujalam Sufalam Yojana. During the years 2018-2020 under Jal Sanchay Abhiyan for water conservation, 41,488 works were undertaken and 42,000 lakh square feet excess water was preserved. This campaign generated 130.47 lakh days of employment.

Concrete gravity dam having 1,210 meter length and 163 meter height with 30 radial gates for spillway were installed. Sardar Sarovar Dam was also filled to its full reservoir level, i.e., 138.68 meters.

Gujarat is the first state that has implemented five desalination plants in coastal area. The state secured first rank in Composite Water Management Index among states with 78 per cent households getting tap water across the state.

Energy

Gujarat is the fastest developing state, hence its energy demand is very high. Power supply to the farmers has been provided during day

time under new scheme ’Dinkar Yojana’. Under ’Jyoti Gram Yojana’, rural area of Gujarat gets 24 hour 3 phase power supply and separate feeder for agriculture for 8 hour 3 phase power supply. Gujarat is a power surplus state since 2010.

The state shares 12 per cent of total renewable energy of the nation and it is 34 per cent of total installed capacity. Total installed capacity of renewable energy is 9,670 MW. As a potential source of such energy, wind energy emerged as a clean and safe option. As per the National Institute Of Wind Energy, the estimated installable potential at 80 meter height is found to be over 35,000 MW in the state. Total installed capacity of wind farms in the state is 7,295.45 MW. The state is the second largest producer of wind power in the country.

The state had announced solar power policy in 2015 allowing investors to set up solar power projects in the state. As of November 2019, solar power projects of 2,703.89 capacity were commissioned.

Gujarat is LNG capital of the country with all its districts covered under LNG network. The state ranks first in PNG connection and industrial PNG connection. It stands second in CNG vehicles.

Industries

Gujarat is one of the highly industrialised states with its reputation of being a major investor-friendly state. The state contributes 7.9 per cent share to the national GDP. It has a proven track record of most favoured investment destination. The state has policies like Start Ups Innovation Scheme under New Industrial Policy-2015, Gujarat Textile Policy-2012, Gujarat Garments and Apparel Policy 2017 to give push to various sectors. As per Annual Survey of Industries, the number of factories increased in 2017-18 to 26,586. The employment -inclusive of managerial, supervisory and clerical personnel in all factories - in 2017-18 increased to 18.27 lakh.

Gujarat has the world’s largest petroleum refining hub at Jamnagar. The state is a global leader in processed diamonds and world’s third largest producer of denim. Gujarat is also emerging as an automobile hub. The state has been ranked the highest in the second edition of Logistics Ease Across Different States (IEADS) Index report, 2019. Gujarat leads in plastic exports with a lion’s share of 45 per cent in the national exports. According to the Annual Survey of Industry 201 7-18,

Gujarat enjoys the status of industrial developed state of India with 16.81 per cent share to country's industrial gross output. Gujarat stands first in terms of fixed capital.

Digital Gujarat

Gujarat unveiled the integrated Online Revenue Applications (iORA) 2.0, which brings 19 services under the revenue department online. It is the first for a state in India towards ease in revenue services. These online services like any ROR (Right Of Records), e- Dhara (land registration), gARVI (Automation of Administration of Registration, valuation and indexing), iRMS (Integrated Revenue Case Management System) will ease revenue service.

Transport

Infrastructure is the backbone of progress and the state has fairly well-developed infrastructure facilities. The Gujarat State Road Transport Corporation delivers transportation facility to about 20.38 lakh people everyday.

Roads and Railways:The total length of railway lines in the state is 5,224 route and total road length is 81,246 kms. With a view to meet the needs of increasing population, BRTS facility is available in the city of Ahemdabad for speedy commutation.

Aviation

The state government has started regional airlines with public private partnership which covers important destinations like Ahemdabad, Surat, Bhavnagar, Jamnagar, Bhuj, Mandvi, Rajkot, etc.

Ports

During the last decade, Gujarat has acquired a status of an important maritime state of the country. Nearly 80 per cent of the total traffic on the non-major ports and about 48 per cent of the total traffic on all the ports of the country is being recorded on the ports of Gujarat, which is a matter of pride for the state. There are 41 minor and intermediate and one major port—the Kandla Port.

Festivals

Gujarat is known for its folk dance and Garba. Commercial, industrial, agricultural, artistic, religious, trade fairs and many more exhibitions are held round the year in different parts of the state. Gujarat show a new

light to artistic development with Ranotsav- Kutchh carnival, which offers tourists a rich cultural festival of light laser show, folk music and exquisite handicrafts. Kutchh has vibrant culture which is often called as 'the cradle of crafmanship'. Tarnetar fair has its own light, charisma with traditional celebration of life and rural Olympic games. Trinetreshwar Mahadev temple is attraction to local, national and international tourists. Tarnetar fair is held at village Tarnetar in the honour of Lord Shiva on the 4th, 5th and 6th days of the bright half of the month of *Bhadrapad* (August/September). Madhavrai fair at Madhavpur near Porbandar is held to celebrate the marriage by elopement of Lord Krishna and Rukmani, on the ninth day of the bright half of the month of *Chaitra* (March /April). Ambaji fair dedicated to Ma Amba is held in Banaskantha district. The biggest annual fair, Janmashtami, the birthday of Lord Krishna, is celebrated at Dwarka and Dakor with great enthusiasm. Other fairs—Dang Darbar, Shamlaji Fair and Bhavnath fair, Chitra-vichitra fair, Vautha Fair are also significant part of state's festivity culture. Navratri-longest festival of dance, Deepavali-festival of lights, Holi, Ganesh Chaturthi, Ramzan, Pateti, Cheti Chand, etc., reflect unity in tradition. Apart from this for people awareness drive Van Mahotsav, Krushi Mahotsav, Ranotsav festivlas, Utarardh Mahotsav are being organised.

Tourist Centres

Gujarat is home to incredible diversity due to its geographic and strategic location. Major cities are Ahmedabad, Gandhinagar, Surat, Baroda, Rajkot, Bhavnagar, Bhuj, Junagadh, Dholavira, Idar, Patan, Lakhota Palace, Rani-ki-vav, Vijaynagar circuit, Gandhi Smirti are main attraction as heritage sites. Gandhi circuit is developed by covering Kocharab Ashram, Gandhi Smriti, Kirti Mandir, Rashtriyashala, Gandhi Ashram, Kaba Gandhi No Delo, National Salt Satygraha Memorial - Dandi, Sardar Patel National Museum - Bardoli.

The Statue of Unity - world's tallest statue with height of 182 metres - is major attraction worldwide. It has huge exhibition hall covering an area of 4,647 sq.uare metres. The hall showcases the life of Sardar Patel, his contribution and his role in the merger of princely states. The Shool Paneshwar Wildlife Sanctuary, life and culture, the tribal people of

Gujarat and the Sardar Sarovar Dam are also displayed through an audio-visual show.

Religious spots like Dwarika, Somnath, Palitana, Pavagadh, Taranga, Ambaji and Girnar are also major tourist attractions.

The state has 23 wildlife sanctuaries and four national parks covering about 8.71 per cent of its total geographical area.

Website : https://gujaratindia.gov.in

Government

Governor	: Acharya Devvrat	*Chief Secretary*	: Anil Mukim
Chief Minister	: Vijaybhai R. Rupani	*Jurisdiction of High Court*	: Gujarat

Haryana

Area	44,212 sq. km	*Population*	: 2.54 crore (2011 census)
Capital	Chandigarh	*Principal Language*	: Hindi and Haryanvi

History and Geography

Haryana has a proud history dating back to the Vedic Age. The state was home to the legendary Bharata dynasty, after which the country was named Bharat. The land of Haryana has been the cradle of Indian culture and civilisation. Archaeological findings by Guy E. Pilgrim in 1915 established that 15 million years ago, the early man lived in the Shivaliks. *Vamana Purana* states that King Kuru ploughed the field of Kurukshetra with a golden plough, drawn by the Nandi of Lord Shiva, and reclaimed an area of seven 'kosas'.

Replete with myths, legends and Vedic references, Haryana's past is steeped in glory. It was on the soil of Haryana that Saint Ved Vyas wrote *Mahabharata.* It was here that Lord Krishna preached the gospel of duty to Arjuna about 5,000 years ago. It was here that the epic battle of Mahabharata was fought. Being the gateway to north India, the region has been the battleground of many a war. The Huns, the Turks and the Tughlaqs invaded India and decisive battles were fought on this land. At the end of the 14th century, Taimur led an army through this area to

Delhi. Later, the Mughals defeated the Lodhis in the historic battle of Panipat in 1526. Another decisive battle was fought in 1556 at this very site, establishing the supremacy of the Mughals up to the advent of the British rule, and the rise of Delhi as the imperial capital of India.

An adjunct to Delhi, Haryana practically remained anonymous until the uprising in 1857. After the British crushed the rebellion, they deprived the Nawabs of Jhajjar and Bahadurgarh, the Raja of Ballabhgarh and Rao Tula Ram of Rewari in Haryana region, of their territories. These were either merged with British territories or handed over to the rulers of Patiala, Nabha and Jind, making Haryana a part of the Punjab province. With the reorganisation of Punjab in November 1956, Haryana was born as a full-fledged state.

Strategically located, Haryana is bounded by Uttar Pradesh in the east, Punjab in the west, Himachal Pradesh in the north, and Rajasthan in the south. The National Capital of Delhi juts into Haryana. With just 1.37 per cent of the total geographical area and less than 2 per cent of India's population, Haryana has carved a place of distinction for itself. Ranked among the most prosperous states in the country, Haryana has the second highest per capita income in India, after Goa.

Agriculture

Agriculture is the mainstay of more than 81 per cent population in the state with the second largest contribution to the food bowl of the country. Under the diversification of crops, more and more area is being brought under cash crops like sugarcane, cotton and oilseeds, vegetable and fruits. Sustainable agriculture is being promoted through the propagation of resource conserving technologies and organic farming.

Haryana is fast emerging as one of the leading states in the field of horticulture in India. Almost all type of fruits, vegetables, spices, mushroom and flowers are being grown. Out of total area under horticulture crops, around 85 per cent area is under vegetables and rest is under fruits and spices. The forest area extends over only 3.62 per cent of the total geographical area and the total forest tree cover of the state including plantation along the road, rail and canal strips is 7.1 per cent.

Irrigation

Haryana has developed an extensive canal network consisting of 1,461 channels having a length of 14,085 kms. The Bhakra System has 522 canals with a total length of 5,961 kms, the Yamuna System has 446 canals covering 4,422 kms and the Lift System has 493 canals covering 3,702 kms. Besides this, the state has vast network of drainage of about 800 drains covering 5,150 kms length. During 2018-19, 304 community/water farm ponds were constructed. Till November 2019, 40 community tanks and 108 individual tanks were constructed. Under Micro Irrigation Scheme "Per Drop More Crop" an area of 3,874.45 lakh hectare was covered during 2018-19.

Power

The first state in the country to have achieved hundred per cent rural electrification way back in 1970, Haryana is well on its way to becoming power surplus from a power deficit state.

Education

Haryana is emerging as an education hub and shaping into a modern-day Takshila and Nalanda. Making elementary education available at reachable distance to all children and opening a large number of institutes of higher learning, offering global standard education, the state is moving fast on the road to becoming a modern hub of education. According to 2011 census, the literacy rate in Haryana is 76.64 per cent against the all-India literacy rate of 74.04 per cent. Haryana's female literacy rate is 66.77 per cent and male literacy rate is 85.38 per cent. The rural population is served by primary schools within a radius of 1.01 km, middle schools within a radius of 1.17 km, high schools within a radius of 1.45 km, and senior secondary schools within a radius of 2.10 km.

Industry

The investment and industry-friendly policies pursued by the state government have made Haryana the cynosure of all investing eyes and put the state on threshold of industrial revolution. Haryana today is the largest producer of passenger cars, tractors, motorcycles, bicycles, refrigerators, scientific instruments, etc. Besides, it is the largest exporter of basmati rice. Panipat handlooms and carpets are known all over the world besides its tasty *panchranga* pickle.

Health

Healthcare has been made both affordable and reachable by setting up a state-wide network of district and sub-divisional hospitals. These are being beefed up with staff and equipment and deficiencies in referral services are being removed. The state-wide network of health centres includes 56 hospitals; 109 community health centres; 467 primary health centres; 2;630 sub-centres; 15 district TB centres; 639 ayurvedic; homeopathy and unani centres; and 90 urban RCH centres are functioning.

Under Mukhya Mantri Muft llaj Yojana (MMIY), seven types of services including surgeries, laboratory tests, diagnostics (X-rays, ECG, and Ultrasound services), OPD/indoor services, medicines, referral transport and dental treatment are being provided free-of-cost. Haryana has secured first rank in the country for Best Performance in National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS).

Information Technology

Out of the 85 proposals for setting up IT/cyber parks in the state, recommended by the committee constituted for the purpose, 35 companies have been granted licences by the town and country planning department.

Transport

Road and rail transport are the main carriers of passenger traffic in Haryana with aviation too playing a small role. It is one state where all villages are linked with metalled roads. The length of the roads in the state is more than 35,303 km.

Railways also play an important role in carrying both interstate and intrastate passengers. Kalka, Ambala, Kurukshetra, Panipat, Rohtak, Jind, Hisar and Jakhal are important railway stations. There is a railway workshop at jagadhari. Aviation too plays its role. There are civil aerodromes at Pinjore, Karnal, Hisar, Bhiwani and Narnaul.

Tourist Centres

A pioneer in highway tourism, Haryana has set up a vast network of 43 tourist complexes all over the state. Having 846-roomed accommodation in them, Haryana tourism attracts 70 lakh tourists every year. The state government has adopted a multi-pronged strategy to

promote tourism. Besides, tourist facilities have been set up at the district headquarters, and in important towns, to cater to the needs of tourists and local people. Some of the important tourist complexes are Surajkund and Baddhkal Lake near Delhi; Sultanpur Birds Sanctuary (Sultanpur); Sohna and Damdama in Gurgaon; and the fascinating pocket of pines in the Morni Hills. The other important resorts are Ethnic India (Rai Sonipat), Blue Jay (Samalkha), Skylark (Panipat), Kama Lake and Oasis (Uchana), Parakeet (Pipli), Kingfisher (Ambala), Magpie (Faridabad), Dabchick (Hodal), Shama (Gurgaon), Jungle Babbler (Dharuhera), Gaurriyya (Bahadurgarh), Myna (Rohtak), Blue Bird (Hisar), Red Bishop (Panchkula), and Pinjore Gardens (Pinjore).

Website : www.haryana.gov.in

Government

Governor	: Satyadeo Narain Arya	*Chief Secretary*	: Vijay Vardhan
Chief Minister	: Manohar Lal Khattar	*Jurisdiction of : High Court*	: Punjab and Haryana High Court

Himachal Pradesh

Area	: 55,673 sq. km	*Population*	: 68.65 lakh (census 2011)
Capital	: Shimla	*Principal Languages*	: Hindi and Pahari

History and Geography

Himachal Pradesh, a beautiful land, is situated in the lap of the western Himalayas, located between 30°22’ and 33°12’ North latitude and between 75°47’ and 79° 4[1] East longitude. This wonderful land inhabited by people of various castes and religions groups, is also called as “Dev Bhumi: the abode of gods and goddesses”. Himachal drives its name from the Himalayas, which literally means “land of snowy mountains”. The territory of this state can be divided into three zones, Outer Himalayas or the Shivaliks, Inner Himalayas or Mid-Mountains and the Greater Himalayas or Alpine Zone. The entire state is punctuated with stone as well as wood temples. The rich culture and traditions have made Himachal a unique world in itself. The shadowy valleys, rugged

crags, glaciers, gigantic pines, roaring rivers and exquisite flora and fauna compose the symphony that is forever vibrant Himachal.

Himachal Pradesh has a very eventful career. On April 15, 1948, the Pradesh was born as a result of the integration of some 30 erstwhile Princely Hill States, twenty six Shimla Hill States and four Punjab Hill States. At the time of its inception, the total area of Himachal Pradesh was 27,018 sq. km. with a population of 9,35,000. On the recommendations of Punjab Boundary Commission, the Government of India, while reorganising Punjab into two separate states of Punjab and Haryana decided to integrate the Punjab hill areas of the districts of Kangra, Shimla, Kullu and Lahaul-Spiti, Nalagarh area of Ambala district, parts of Una tehsil of Hoshiarpur district, and of Pathankot tehsil of Gurdaspur district with Himachal Pradesh. The integration came about on November 1, 1966 and Himachal's territorial area increased to 55,673 sq. km. The new state was inaugurated in Shimla in 1971. With this, Himachal Pradesh was established as the 18th state of the Indian Union.

Agriculture

Agriculture provides direct employment to about 70 per cent of the main working population of the state. Income from agriculture and allied sectors accounts for nearly 22.1 per cent of the total state domestic product. Out of the total geographical area of 55,673 sq. km, area of operational holding is about 9.79 lakh hectares.

The agro-climatic conditions in the state are congenial for the production of cash crops like seed potato, off-season vegetables and ginger. In order to increase the production of foodgrains, emphasis has been laid on distribution of seeds of high yielding varieties to the farmers. "Mukhya Mantri Jaivik Kheti Purskar Yojana" has been started to boost the morale of the farmers. Himachal Pradesh has bagged "Krishi Karmanya Puraskar" on national level for the consecutive years in 2014-2015 and 2015-2016. For the welfare of farmers, 2,061 bank branches in the state are implementing Kisan Credit Card Scheme. "Mukhya Mantri Khet Sanrakshan Yojana" was launched to protect the farms from wild animals by providing solar fencing. Subsidy on anti-hail nets has been increased from 50 per cent to 80 per cent.

Horticulture

Himachal Pradesh is called the "Fruit Bowl" of the country. Horticulture plays an important role in the agrarian economy. Over 2.27 lakh hectare area has been brought under fruit cultivation and fruit production has reached 10.28 lakh MT. The state has favourable climatic conditions to produce a variety of fruits such as apple, pear, peach, plum, apricot, mango, litchi, guava, strawberry and citrus fruits. For protection of horticulture crops from hailstorms, 15, 51,813 sq. meter area has been brought under anti-hail nets. The Horticulture Technology Mission is being implemented for the integrated development of horticulture. This Mission is based on the "End To End Approach", taking into account the entire gamut of horticulture development with all backward and forward linkages in a holistic manner. To ensure remunerative prices in apple, mango and citrus fruits produce to the farmers, state government has starting marketing intervention scheme.

Roads

Being a hilly state, the roads are very important and main mode of communication for the people. There were only 288 km of roads in the state at time of its formation in 1948. "Pradhan Mantri Gram Sadak Yojana" has shown remarkable progress in the state. "Mukhya Mantri Gram Sadak Yojana" has also been implemented to provide last mile connectivity to villages/habitations.

Hydro-Power Generation

Hydel-power potential is the key to prosperity of the state and out of the total available potential of 27,436 MW, the state has harnessed 10,351 MW power so far. Cent per cent electrification had been achieved in the state.

Irrigation and Water Supply

Water is an essential amenity for the development of any state. Irrigation facility for the agriculture and horticulture is being provided in the state. Out of the total 3.35 lakh hectare area that can be provided assured irrigation facility, 2.69 lakh hectare area has been brought under irrigation schemes. Water treatment plants are being provided in all the drinking water supply schemes.

Forestry

Forest in Himachal Pradesh covers an area of 37,033 sq. km which comes to 66.52 per cent of the total geographical area of the state. The strategy of government in forestry management is conservation along with rational utilisation and side by side expanding its base. Forest plantation is being carried out under productive forestry and soil conservation schemes. A new scheme "Sub-Mission on Agro Forestry" was launched with the objective to increase tree plantation in an integrated manner along with crops and livestock to improve employment opportunities of small farmers. Wildlife and nature conservation schemes aim at improving the habitat and facilitating provisions of areas (sanctuaries and national parks) so as to accord protection to the various species of birds and animals facing extinction.

Tourism

The state is endowed with all the basic resources necessary for thriving tourism activity like geographical and cultural diversity, clean and peaceful environment and beautiful streams, sacred shrines, historical monuments and hospitable people. Tourism industry has been given very high priority and the government has developed appropriate infrastructure for its development which includes public utility services, roads, communication network, airports, transport facilities, clean toilets at bus stands, restaurants and petrol pumps, water supply and other civic amenties. Besides there are 2,604 hotels having about 70,869 of bed facility, about 787 home stay units are there in the state.

Tourism contributes 6.8 per cent to state GDP and it is set to increase. Incentive of revised rates of electicity duty has been given to the new tourism industry. Package tours are being developed and focus is kept on the adventure, religious heritage, winter sports, trekking and outdoor activities.

Website : www.himachal.nic.in

Government

Governor :	Bandaru Dattatraya	*Chief Secretary :*	Anil Khachi
Chief Minister :	Jai Ram Thakur	*Jurisdiction of : High Court*	Himachal Pradesh

Jharkhand

Area	: 79,716 sq. km	*Population*	: 3,29,88,134 (as per 2011 census)
Capital	: Ranchi	*Principal Language*	: Hindi

History and Geography

Jharkhand, which came into being in November 2000 as another state of the Union, is the homeland of the tribals who had dreamt of a separate state for a long time. According to legend, Raja Jai Singh Deo of Odisha had declared himself the ruler of Jharkhand in the 13th century. It largely comprises forest tracks of Chhotanagpur plateau and Santhal Pargana and has distinct cultural traditions. In post-Independence era, the Jharkhand Mukti Morcha started a regular agitation which impelled the government to establish the Jharkhand Area Autonomous Council in 1995 and finally a full-fledged state.

Jharkhand is bounded by West Bengal in the east, Uttar Pradesh and Chhattisgarh in the west, Bihar in the north and Odisha in the south.

Agriculture

The state has an area of 79,714 sq. km of which 18,423 sq. km is forest land. Agriculture and allied activities are the major source of Jharkhand's economy. The total cultivable land is only 38 lakh hectare.

Irrigation and Power

Damodar, Maurakshi, Barakar, North Koyel, South Koyel, Sankh, Subarnarekha, Kharkai, and Ajay are major water resources in the state. The net sown area is 1.8 million hectare of which 8 per cent is irrigated. The installed capacity of power in the state is 2,590 MW.

Industry and Minerals

Some of Jharkhand's major industries are Bokaro Steel Plant in the public sector, and Tata Iron and Steel Company (TISCO) in Jamshedpur in the private sector. Other important industries are Tata Engineering and Locomotive Company (TELCO), Timken India Limited (Jamshedpur), Bharat Coking Coal Limited (Dhanbad), Khilari Cement Factory (Palamu), Indian Aluminum (Muri), ACC Cement (Chaibasa), Central Coalfields Limited (Ranchi), Usha Martin, Usha Beltron, Uranium

Corporation (I) Limited (Jadugora), Hindustan Copper Limited (Mussabani), Tin Plate Company of India Limited (Jamshedpur), Indian Explosive Limited (Gomia), Hindalco Bauxite (Lohardaga), etc.

The state is rich in mineral resources. The important available minerals are coal, iron ore, limestone, copper ore, bauxite, pyrite, china clay, kyanite, fine clay, dolomite, graphite, bentonite, soap stone, quartz sand and silica sand. The nascent state has the enormous potential for exploitation of coal, mica and other minerals particularly in Singhbhum, Bokaro, Hazaribagh, Ranchi, Koderma and Dhanbad.

Transport

Roads : The total length of roads is 4,311 km. This includes 1,500 km national highways and 2,711 km state highways.

Railways : The state has a well-developed railway system. Ranchi, Bokaro, Dhanbad and Jamshedpur are some of the major railway stations.

Aviation : Ranchi is connected with Delhi, Patna and Mumbai. Cities which have air strips are Jamshedpur, Bokaro, Giridih, Deoghar, Hazaribagh, Daltonganj and Noamundi.

Tourist Centres

There are many scenic attractions in the state, namely, Ichagarh Bird Sanctuary, Udhwa Sanctuary-Sahibganj (Pataura Lake), Chachro Crocodile Breeding Centre-Koderma (Tilaya Dam), Chandrapura Bird Sanctuary, Jawaharlal Nehru Zoological Garden (Bokaro), Tenughat Bird Sanctuary, Dalma WildLife Sanctuary (Jamshedpur), Tata Steel Zoological Park (Jamshedpur), Palkote Wildlife Sanctuary (Gumla), Bhagwan Birsa Zoological Gardens (Ranchi), Birsa Deer Sanctuary (Kalmati Ranchi), Betla National Park (Palamau), Ranchi Aquarium (Ranchi), Hazaribagh National Park, Tatoloi Hot Water Stream (Dumka) and Saranda Forest.

Apart from this, Jharkhand has some famous temples like Jharkhand Dham, Langta Baba Temple/Majar, Bindhvashini Temple, Masanjore Dam, etc.

Website: www.jharkhand.gov.in

Government

Governor	: Draupadi Murmu	*Chief Secretary*	: Sukhdeo Singh
Chief Minister	: Hemant Soren	*Jurisdiction of High Court*	: Jharkhand

Karnataka

Area	: 1,91,791 sq. km	*Population*	: 6.11 crore (prov. census 2011)
Capital	: Bengaluru	*Principal Language*	: Kannada

History and Geography

Karnataka has a recorded history of more than 2,000 years. Apart from its subjection to the rule of Nandas, Mauryas and the Satavahanas, Karnataka came to have indigenous dynasties like the Kadambas of Banavasi and the Gangas from the middle of the 4th century AD. The world renowned Gomateshwara monolith at Shravanabelagola was installed by a Ganga minister Chavundaraya. The colossal rock cut image of Sri Gomateshwara is the most magnificent among all Jaina works of art. Numerous visitors arrive at Shravanabelagola to gaze at this and other monuments. The Chalukyas of Badami (500-735 AD) reigned over a wider area, from Narmada to the Kaveri from the days of Pulikeshi II (609-642 AD) who even defeated the mighty Harshavardhana of Kanauj. This dynasty created fine, everlasting and the most beautiful monuments at Badami, Aihole and Pattadakal, both structural and rock-cut. Aihole has been one of the cradles of temple architecture in the country. The Rashtrakutas (753-973 AD) of Malkhed who succeeded them heaped tributes on the rulers of Kanauj successively in the so-called 'Age of Imperial Kanauj'. Kannada literature developed during this period. Outstanding Jain scholars of India lived in their court. The Chalukyas of Kalyana (973 to 1189 AD) and their feudatories, the Hoysalas of Halebidu built exquisite temples, encouraged literature and various fine arts. Noted jurist Vijnaneshwara (work: *Mitakshara)* lived at Kalyana. The great religious leader Basaveshwara was a minister at Kalyana. Vijayanagar empire (1336-1646) patronised and fostered indigenous traditions and encouraged arts, religion and literature in Sanskrit, Kannada, Telugu and Tamil. Overseas trade flourished. The Bahamani

Sultans (Capital: Gulbarga, later Bidar) and the Bijapur Adilshahis raised fine Indo-Saracenic buildings and encouraged Urdu and Persian literature. Advent of the Portuguese resulted in the introduction of new crops (tobacco, maize, chillies, groundnut, potato, etc.). After the fall of the Peshwa (1818) and Tipu (1799), Karnataka came under British rule. Christian missionaries introduced English education and printing during the 19th century. Revolution in transport, communication and industries was ushered in. The urban middle-class emerged. Mysore dynasty initiated and helped industrialisation and cultural growth.

Freedom movement was followed by the movement for the unification of Karnataka. After Independence, the Mysore state was created in 1953, wherein all the Kannada dominant areas under different dispensations were unified and the enlarged Mysore state carved in 1956 and was renamed Karnataka in 1973.

Karnataka is situated between 11 °31’ and 18°14’ north latitudes and 74°12’ and 78°10’ east longitudes. It is bounded by Goa and Maharashtra on the north; Telangana and Andhra Pradesh on the east; Tamil Nadu on the south east; and Kerala on the south.

Forestry and Wildlife

The forest department manages about 20.15 per cent of the geographical area of the state. Forests have been classified as reserved forests, protected forests, unclassified forests, villages forests, and private forests. There are 5 national parks and 23 wildlife sanctuaries. To overcome shortage of fuel wood, fodder and timber, degraded forests and waste lands are being developed. Emphasis is also being laid on the conservation, protection and development of the fragile ecosystem of the Western Ghats. Several wildlife protection schemes such as Project Tiger and Project Elephant are being implemented with the central assistance. The concept of Joint Forest Planning and Management applied to the two externally aided projects, viz., Western Ghats Forestry and Environment Project (DFID) and Forestry and Environment Project for Eastern Plains (JBIS) has resulted in village forest planning and management through establishment of Village Forest Committees.

Agriculture

The state has 66 per cent rural population and 55.60 per cent of workers are agricultural labourers. The state has 60 per cent (114 lakh ha)

cultivable land and 72 per cent of the cultivable area is rainfed; only 28 per cent is under irrigation. The state has 10 agro-climatic zones. The red soil constitutes major soil type, followed by black soil. The net sown area of the state constituted 51.7 per cent of the total land.

Dairy

Karnataka is one of the major milk producers and the Karnataka Milk Federation has numerous dairy processing plants.

Horticulture

Horticulture crops are grown in an area of 16.80 lakhs hectare and the produces amount to 101 lakh tonnes. The Union Government earmarked ₹ 1 71.29 crore for Karnataka under National Horticulture Mission.

Power Generation

Karnataka was the pioneer in establishing hydroelectric projects in the country. It has 7,222.91 power generation installed capacity and 31,229 million units of electricity was generated.

Biotechnology

Karnataka and Bengaluru city in particular have become the largest bio-clusters in the country.

Transport

Roads: Total road length has increased from 83,749 km to 2,15,849 km.

Ports: The state has a maritime coastline of 155 nautical mile (300 kilometres) and has only one major port at Mangaluru, i.e., New Mangaluru Port and studded with ten minor ports —Karwar, Belekeri, Tadria, Honnavar, Bhatkala, Kundapur, Hangarkatta, Malpe, Padubidri and Old Mangalore. Out of the ten ports, Karwar is the only all-weather port while the other nine are the riverine anchorage lighterage ports.

Aviation:The Civil Aviation Sector has seen tremendous growth with international air passenger traffic growth of 50 per cent and domestic air passenger growth at 44 per cent.

Tourism

Karnataka “One State Many Worlds” is becoming a hub of tourist attraction of south India. The IT and BT Centre in Bengaluru has received a lot of tourists in the recent past. The state is known for its heritage monuments and eco-tourism destinations. The Golden Chariot named

after the famous Stone Chariot in Hampi, a world heritage site, in southern India, travels through timeless historical heritage sites, resplendent palaces, wildlife and golden beaches. Its 7 nights/8 days colourful journey begins every Monday from Bengaluru and traverses through Mysuru, visiting Srirangapatna, Mysore Palace, the Nagarhole National Park (Kabini) and continuing to the historical sites of Shravanabelagola, Belur— the 11 th century cradle of Hoysala architecture and a world heritage site, Halebidu, Hampi and thereafter entering into the triangular heritage sites of Badami, Pattadakal, Aihole and finally the Golden Beaches of Goa before ending in Bengaluru.

Website : www.karnataka.gov.in

Government

Governor	: Vajubhai Rudabhai Vala	*Chief Secretary*	: T.M. Vijaya Bhaskar
Chief Minister	: B. S. Yediyurappa	*Jurisdiction of High Court*	: Karnataka

Kerala

Area	: 38,863 sq. km	*Population*	: 3.34 crore (as per census 2011)
Capital	: Thiruvananthapuram	*Principal Language*	: Malayalam

History and Geography

Kerala is in the extreme south-west of the Indian subcontinent. When independent India amalgamated small states together, Travancore and Cochin states were integrated to form Travancore-Cochin state in July 1949. However, Malabar remained under the Madras province. Under the States Re-organisation Act, 1956, Travancore-Cochin state and Malabar were united to form Kerala state in November 1956.

In between the high Western Ghats on the east and the Arabian Sea on the west, the width of the state varies from 35 km to 120 km. According to the geographical features, the state can be divided into hills, valleys, midland plains and coastal belt. 44 rivers (41 west flowing and 3 east flowing) cut across the state with their innumerable tributaries and

branches. The backwaters form an attractive and economically valuable feature of Kerala.

Agriculture

Kerala, the land of lush green paddy fields, cool coconut groves, fragrant spice garden, dubbed as "God's Own Country" is nestled in the southern tip of India. Fertile soil and warm humid tropical climate make Kerala an ideal place for cultivation of a wide variety of crops which include coconut, rice, rubber, banana, spices, fruits, vegetables, cashew nut, tubers, coffee, tea, medicinal plants, arecanut, etc.

Industry

To transform Kerala into a vibrant entrepreneurial society with faster, inclusive and sutainable economic growth in order to achieve global standards in every domain, the government has taken steps to implement investor-friendly industrial policy to enable constructive investment in all sectors.

Irrigation

The surface irrigation constitutes major chunk of irrigation infrastructure. There are 18 dams intended for irrigation. Irrigation development is mainly centered on the developement of surface water resources mainly on the major and medium irrigation projects. In each plan, priority in allocation was given for the development of major and medium irrigation projects. Rice is the major crop benefitted through irrigation infrastructure. With the fast changes taking place in the farm front with notable reduction in the area under rice cultivation, even the distribution system already developed for gravity irrigation to service rice cultivation now require realignment.

Drinking Water

Demand for water is increasing due to multitude of human activities in the country. The primary responsibility of providing drinking water facilities in the country rests with the respective state governments. In urban and rural areas of the state, 29 per cent and 71 per cent of the population were covered.

Power

Power sector plays a vital role in all developmental activities in Kerala. Obviously power crisis is the prime obstacle to start new

initiatives in the industrial field. Kerala is a power deficit state which imports 60 per cent of power from other states. A major achievement is that it has achieved full electrification in all villages.

Transport

Transport sector plays a pivotal role in the overall development of the country which enables social, cultural and trade development between countries. Transport infrastructure consists of fixed installations, roads, railways, airways, waterways, canals, pipelines and terminals. Kerala holds a good transport system. The roads are maintained by National Highway Authority, Public Works Department, local bodies, Department of Irrigation, Kerala State Electricity Board, Department of Forest, railways, etc.

Port Sector: Kerala lies in the south-west corner of the Indian peninsula. It has a coastal length of 585 km and an average width of about 60 km with one major port at Kochi and 1 7 minor ports. The geographical location of the state is very close to international shipping route. There are 17 minor ports, out of which 3 are considered as intermediate ports based on berthing, cargo handling and storage facilities available in them. These have contributed much to the development of industry, trade, commerce and agriculture in the country.

Railways: Railways are essentially the cause for industrial upsurge in the nation and it still remains the largest employment provider for the huge population of the country. The total railway route in Kerala has a length of 1,257 km and covers 13 railway routes.

Air Transport: Kerala has four airports at Thiruvananthapuram, Kochi, Kozhikode, and Kannur, handling both international and domestic flights. Thiruvananthapuram and Kozhikode airports are owned by Government of India and Kochi airport is owned by Kochi International Airport Ltd., a company set up by Government of Kerala with public private participation.

Health Status of Women

Kerala's high social development is mostly reflected in women's high health status in comparison to men in the state as well as to persons in other parts of the country. Most of the health indicators are highly favourable to women. Life expectancy of women in the state at 76.9 years

is the highest in India (all India average is 67.7 years). The demographic health indicators also seem to be favourable to women. Low maternal mortality rate and high female life expectancy are highly attributed to the extensive public provisioning for maternal care in the state.

Labour Welfare

Kerala has followed a rights-based approach that is sensitive to the changing needs of the labour market. The policy initiatives of the state seek the overall growth and development of the industry and the individual worker. Workers are protected through the constant intervention of the government on the right to work, right against discrimination, prohibition of child labour, social security, protection of wages, redressal of grievances, right to organise and form trade unions, collective bargaining and participation in management. It is an accepted fact that the labour laws and labour welfare schemes implemented by the state are much wider in scope than that of other parts of the country. The government is of the view that every employee/worker be a member of a welfare board and get lifelong social security.

Migrant Workers

The recent trend in the employment sector in the state shows a large inflow of migrant workers from other states such as West Bengal, Bihar, Odisha, Uttar Pradesh, Chhattisgarh, Jharkhand, etc., besides the neighbouring states. Working conditions of the inter-state migrant workers are dealt under the Inter-state Migrant Workmen Regulation of Employment and Conditions of Service Act, 1979. As per the provisions of the Act, the contractor has to obtain a recruitment licence from the State from where the workers are recruited (original state) and an employment licence from the State where they are employed (recipient state). Accordingly, the contractor and the principal employer become liable for ensuring the provisions envisaged in the enactment as an immediate employer and the principal employer respectively.

Festivals

Kerala is home to many colourful festivals. *Onam* is the most typical of festivals which coincides with the harvest season. It is now celebrated on astronomical New Year Day. Navarathri is celebrated as Saraswathi Pooja. Maha Shivarathri is celebrated on the banks of Periyar river as a spectacular festival which is compared to Kumbhamela. The 41 -day

festival, which coincides with Makaravilakku in Sabarimala Ayyappan Temple, attracts lakhs of people from India and abroad. The Vallamkali or boat race is typical of Kerala. All the boat festivals have a religious origin except Nehru Trophy Boat Race conducted in the Punnamada Lake. Thrissur celebrates *Pooram* festival in April-May every year with an impressive procession of caparisoned elephants and display of unparalleled pyrotechnics. Main Christian festivals are Christmas and Easter. Mormon Convention held every year on the Pumba riverbed is the biggest gathering of Christians in Asia. The Muslims celebrate *Milade Shareef, Ramzan, Id-ul-Fitr* and *Bakrid.*

Tourism

Kerala, located on the south-western tip of India, enjoys unique geographical features that have made it one of the most sought after tourist destinations in the world. Fondly referred to as "God's Own Country", Kerala was selected by the National Geographic Traveller as one of the 50 destinations of a lifetime and one of the 13 paradises in the world. Its unique eco-tourism initiatives, culture and traditions coupled with its varied demography has made Kerala one of the most popular tourist destinations in the world. An equable climate, serene beaches, tranquil stretches of back waters, lush hill stations and exotic wildlife are the major attractions of this land. A unique advantage of Kerala is that most of the destinations here are only a 2-4 hour drive from the other.

Website : www.kerala.gov.in

Government

Governor	: Arif Mohammed Khan	*Chief Secretary*	: Dr. Vishwas Mehta
Chief Minister	: Pinarayi Vijayan	*Jurisdiction of : High Court*	Kerala and Lakshadweep Islands

Madhya Pradesh

Area	: 3,08,252 sq. km	Population	: 7.27 crore (prov. census 2011)
Capital	: Bhopal	Principal	: Hindi, Urdu

History and Geography

Madhya Pradesh is the second largest Indian state in size with an area of 3,08,000 sq. km. Geographically it occupies a pivotal position in the country. King Ashoka, first of all, ruled over Ujjain. A sizeable portion of Central India was part of the Gupta empire (300-500 A.D.). The Muslims came here in the beginning of 11th century. First, Mahmud Ghazni came and then Mohammad Gouri, who incorporated some parts of Central India into the ruling territory of Delhi. This part was also part of the Mughal empire. During the period between the beginning of the influence of Marathas and the death of Madhoji Scindia in 1 794, Marathas were on the ascendant in Central India but later on the small states started coming into existence. These small states became the cause of perpetuation of British power in the country.

Queen Ahilyabai Holkar of Indore, the Gond Maharani Kamalapati and Queen Durgawati, etc., were women rulers whose names have left an indelible imprint on Indian history for their outstanding rule. Madhya Pradesh came into being in November 1956. It was reorganised in November 2000 to create a new Chhattisgarh state. The successive state, now, is bounded in north by Uttar Pradesh; east by Chhattisgarh; south by Maharashtra; and west by Gujarat and Rajasthan.

Economy

Madhya Pradesh has gone from strength to strength in economic growth that has emerged as a study of success all over the country. Its GSDP has gone up from more ₹ 2.63 lakh crore to an impressive ₹ 9.07 lakh crore.

Agriculture

Madhya Pradesh has posted country's highest agricultural growth rate which had averaged above 20 per cent over last four years. The state leads the country in production of pulses, oilseeds, soyabean, gram, pea, garlic, guava and medicinal and aromatic herbs. Horticulture is being promoted in a big way.

Irrigation

Top priority has been given to irrigation following which the area under irrigation has increased from mere 7.5 lakh hectare ten years back

to 40.3 lakh hectare now. Narmada-Kshipra Link Project has been implemented. Tewnty-two major, 53 medium and over 5,237 minor irrigation projects have been completed over last five years, thereby increasing the canal irrigation capacity by over 2.5 times.

Power

Madhya Pradesh has witnessed a total turn-around in power sector. Power availability has increased from just 8,01 7 MW 12 years ago to 20,874 MW now. Country's largest 750 MW solar energy plant has been established in Rewa.

Industry

In order to promote micro, small and medium industries, a separate MSME department has been set up. Following implementation of MSME Promotion Policy of State Government, 50,000 units were registered under industry based memorandum. With an investment of over ₹ 5 thousand crore these units have provided jobs to over 2 lakh people.

Department of Happiness

A Department of Happiness has been set up in the state as part of efforts to create an enabling atmosphere for people to live a happy and blissful life. The concept of happiness that Madhya Pradesh aspires to pursue is primarily based on time-tested Indian wisdom besides taking into account the indices that determine national growth as also the experiences of other countries in our strategies and action plans.

Transport

Roads: The total length of roads in the state is 70,961 km. The length of national highway in the state is 8,858 km while state highway extends to 11,389 km.

Railways: The main rail route linking northern with southern India passes through the state. Main junctions are Bhopal, Bina, Gwalior, Indore, Itarsi, Jabalpur, Katni, Ratlam and Ujjain. The divisional railways headquarters are at Bhopal, Ratlam and Jabalpur.

Festivals

A number of festivals are celebrated in the state. An important tribal festival is *Bhagoriya* marked by traditional gaiety and enthusiasm. *Shivratri* is celebrated in Khajuraho, Bhojpur, Pachmarhi and Ujjain and

has its own local flavour while *Ramnavami* festival at Chitrakoot and Orchha has a unique sense of devotion imbued with tradition. Festivals of Orchha, Malwa, Pachmarhi bring to the fore repertoire of culture and art of the people. Tansen Music Festival, Gwalior; Ustad Allauddin Khan Music Festival Maihar; Kalidas Samaroh, Ujjain; and Festival of Dances at Khajuraho was some of the well-known art festivals of Madhya Pradesh. An annual Narmada Festival has been started from this year at Bedhaghat in Jabalpur, famous for its marble rocks. A Shivpuri festival has been started at Shivpuri. Betwa festival has also been started at Vidisha.

Tourist Centres

Perfectly preserved medieval cities, refreshing and enchanting wildlife sanctuaries and some of the holiest and most revered pilgrim centres offer to the tourist the most fulfilling experience. Tranquil beauty of Pachmarhi, glittering splendour of marble rocks and roaring sound of Dhuandhar Fall at Bedaghat, Kanha National Park, with its unique Barasingha, and Bandhavgarh National Park with its prehistoric caves and wildlife are some of the major attractions of the state. Gwalior, Mandu, Datia, Chanderi, Jabalpur, Orchha, Raisen, Sanchi, Vidisha, Udaygiri, Bhimbetika, Indore and Bhopal are the places well-known for their historical monuments. Maheshwar, Omkareshwar, Ujjain, Chitrakoot and Amarkantak are major centres of pilgrimage. Unique temples of Khajuraho are famous all over the world. The temples of Orchha, Bhojpur and Udaypur attract large number of tourists as well as pilgrims. Archaeological treasures are preserved in the museums at Satna, Sanchi, Vidisha, Gwalior, Indore, Mandsaur, Ujjain, Rajgarh, Bhopal, Jabalpur, Rewa and many other places. Omkareshwar, Maheshwar and Amarkantak have been declared holy cities for their integrated development in accordance with their religious significance.

Website : www.mp.gov.in

Government

Governor	: Anandiben Patel	*Chief Secretary*	: Iqbal Singh Bains
Chief Minister	: Shivraj Singh Chouhan	*Jurisdiction of High Court*	: Madhya Pradesh

Maharashtra

Area	: 3,07,713 sq. km	*Population*	: 11.24 crore (census 2011)
Capital	: Mumbai	*Principal Language*	: Marathi

History and Geography

The first well-known rulers of Maharashtra were the Satavahanas (230 BC to 225 AD), who were practically the founders of Maharashtra, and have left a plethora of literary, epigraphic, artistic, and archaeological evidence. Then came the Vakatakas, who established a pan-Indian empire. Under them, this area witnessed an all-sided development in the fields of learning, arts and religion. Some of the Ajanta Caves and Fresco Paintings reached their pinnacle during their rule. After the Vakatakas and after a brief interlude of the Kalachuri dynasty, the most important rulers were the Chalukyas followed by the Rashtrakutas and the Yadavas apart from the Shilaharas on the coast. The Yadavas, with Marathi as their court language extended their authority over large parts of the Deccan.

While the Bahamani rule brought a degree of cohesion to the land and its culture, a uniquely homogeneous evolution of Maharashtra as an entity became a reality under the able leadership of Shivaji. A new sense of Swaraj and nationalism was evolved by Shivaji. His noble and glorious power stalled the Mughal advances into this part of India. The Peshwas established the Maratha supremacy from the Deccan Plateau to some areas in northern India.

Maharashtra was in the forefront during freedom struggle and it was here that the Indian National Congress was born. A galaxy of leaders from Mumbai and other cities of the state led the Congress movement under the guidance of Tilak and then Mahatma Gandhi. Maharashtra was the home of Gandhiji's movement, while Sevagram was the capital of nationalistic India during the Gandhian era.

The administrative evolution of Maharashtra is the outcome of the linguistic reorganisation of the states of India, effected in May 1960. The state was formed by bringing together all contiguous Marathi-speaking areas, which previously belonged to four different administrative hegemonies with Bombay as the capital. The city's name was changed to Mumbai in 1995. These districts between Daman and Goa that formed

part of the original British Bombay Province; five districts of the Nizam's dominion of Hyderabad; eight districts in the south of the Central provinces (Madhya Pradesh); and a sizeable number of petty native-ruled state enclaves lying enclosed within the above areas, were later merged with adjoining districts. Located in the north centre of Peninsular India, with the command of the Arabian Sea through its Port of Mumbai, Maharashtra has a remarkable physical homogeneity, enforced by its underlying geology. The dominant physical trait of the state is its plateau character. Maharashtra is a plateau of plateaus, its western upturned rims rising to form the Sahyadri Range parallel to the sea-coast and its slopes gently descending towards the east and south-east. Satpura ranges cover the northern part, while Ajanta and Satmala ranges run through central part. Arabian Sea guards the western boundary of the state, while Gujarat and Madhya Pradesh are on the northern side. Chhattisgarh and Telangana cover the eastern boundary of the state. Karnataka and Andhra Pradesh are on its southern side.

Agriculture

About 53 per cent of population depends upon agriculture and allied activities for livelihood. Over the years the sector has witnessed remarkable transformation, even though it continues to be vulnerable to the challenges posed by climate change and degradation of productive land. Various strategic initiatives have been taken up by the central and the state governments to enhance farmers' income by boosting agricultural production, encouraging agro-processing and promoting exports. Jalyukta Shivar Abhiyan is an important water conservation mission being implemented in the state. Principal crops are rice, maize, bajra and jowar. The state is a major producer of oil-seeds, with soyabean as the major oilseed crop. Sugarcane and cotton are the primary cash crops. Maharashtra has also been in the forefront of the cooperative movement.

Industry

The state is India's most industrialised state, contributing 18 per cent Gross Value Added at all India level as per the Annual Survey of Industries 2017-18. Major industries in terms of total value of output are food and beverages, chemicals and chemical products, petroleum, automobiles and metals and metal products. Maharashtra is the second

largest producer of sugar behind Uttar Pradesh with 144 out of 446 sugar mills located in the state. It has identified industrial sectors like auto, engineering, electronics, textile, defence and information technology as focus sectors considering the national and international trends and potential of the resources in the state. Mumbai Metropolitan Region, Pune, Pimpri-Chinchwad, Nashik, Aurangabad, Nagpur and Kolhapur are some of the leading industrial clusters in the state. Mumbai is also the financial and entertainment capital of India.

Transport

Roads : Total length of roads in the state is 3.01 lakh km consisting of 10,413 km of national highways; 34;361 km of state highways; 61;850 kms of major district roads; 48;422 km of other district roads; and 1.46 lakh kms of village roads.

Railways : The railway route length including Konkan railway in the state is 6,199 Kms which is 9.1 per cent of the total railway route length (67,796.13 km) of the country. Mumbai is the headquarters of both the Central and the Western Railways. The suburban railway or the Mumbai Local, with a daily ridership of 8 million, is among the largest city railway networks in the world.

Aviation : There are 3 international and 15 domestic airports in the state. The Chhatrapati Shivaji Maharaj International Airport in Mumbai is the second busiest airport in India, after the Indira Gandhi International Airport in Delhi. To reduce air traffic congestion, a new airport at Navi Mumbai is being built.

Ports : Mumbai Port and the Jawaharlal Nehru Port (JNPT) are the two major ports of the state. JNPT, located at Nhava Sheva opposite the Mumbai harbour, is the largest container port in India, accounting for half of all container cargo handled by Indian ports.

Tourism

Maharashtra has five exclusive UNESCO World Heritage Sites, viz., Ajanta Caves, Ellora Caves, Elephanta Island, Chhatrapati Shivaj Maharaj Terminus (formerly Victoria Terminus) and the 2018 inscribed Victorian and Art Deco Ensemble of Mumbai. Lonavala, Matheran, Mahabaleshwar and Panchagani are the main hill stations, while Alibag, Murud-Janjira, Ganapatipule and Tarkarli are the top beach destinations.

Shirdi, Kolhapur, Pandharpur, Tuljapur, Trimbakeshwar, Bhimashankar, Ambejogai are the leading religious places. Sachkhand Sri Hazur Saheb at Nanded is a major destination for Sikh pilgrims.

Website: www.maharashtra.gov.in

Government

Governor :	Bhagat Singh Koshyari	*Chief Secretary*	: Sanjay Kumar
Chief Minister :	Uddhav Thackeray	*Jurisdiction of High Court*	: Maharashtra, Goa, Daman, Diu, Dadra and Nagar Haveli

Manipur

Area	: 22,327 sq. km	*Population*	: 28.56 lakh (2011 census)
Capital	: Imphal	*Principal Language*	: Manipuri

History and Geography

Manipur has a long and glorious history from before the beginning of the Christian era. The political history of Manipur could be traced back to 33 A.D. with the coronation of Nongda Lairen Pakhangba. After Pakhangba, a number of kings ruled over the kingdom of Manipur. The independence and sovereignty remained uninterrupted until the Burmese invasion and occupation for around seven years in the first quarter of the 19th century (1819-1826). Then, Manipur came under British rule in 1891. Manipur regained its independence in 1947 and merged into Indian Union in 1950. Thus, it became a Part C State under the purview of Chief Commissioner. During 1950-51, an advisory form of Government was introduced and in 1957 this was replaced by a Territorial Council of 30 elected and 2 nominated members. Later, in 1963, a Territorial Assembly of 30 elected and 3 nominated members was set up under the Government of Union Territories Act, 1963. The status of administrator was raised from that of a Chief Commissioner to that of a Lt. Governor in December, 1969. Manipur became a full-fledged state in 1972 with a Legislative Assembly of 60 members of whom 19 are reserved for Scheduled Tribes and one for Scheduled Castes. The state is represented

in the Lok Sabha by two members and by one member in the Rajya Sabha.

The state is situated in the extreme north-eastern border of the country. It is bound on the east by upper Myanmar; on the north by Nagaland; on the west by Cachar district of Assam; and on the south by Chin hills of Myanmar and Mizoram. Manipur has a total border line of about 854 km of which about 352 km are international boundary line with Myanmar on the east and south-east. This state is in a geographically unique position, since it virtually is the meeting point between India and South-East Asia. Manipur lies between 23.80° N and 25.68° N latitude and between 93.03° E and 94.78° E longitude.

The state has a total area of 22,327 sq. km. There is a small oval-shaped plain in the central part. This central plain known as Imphal Valley is at a height of about 790 metres above Mean Sea Level (MSL). This valley is surrounded by hills on all sides. The hill covers about 9/10 of the total area of the state. The hill ranges are higher on the north and gradually diminish in height towards the south. The valley itself slopes down towards the south.

Agriculture

Agriculture and allied activities are the only mainstay of the state's economy where about 70 per cent of the population depends on it. The state has two topographical zones — valley and hills. The valley is known as the 'Rice Bowl' of the state. The valley has sub-tropical to tropical to sub-temperate climates. The hills have sub-temperate to temperate climate with an average altitude of 3,000 metres above MSL. It has distinct winter, warm, humid and rainy summer. The average rainfall during the last ten years has been recorded 1,482.20 mm, with heavy precipitation during the month of June, July and August. The growth of agriculture in the state has been quite uneven for the reason that its production still depends on seasonal rainfall.

Forest

In terms of forest canopy density classes, it has 701 sq. km of very dense forests, 5474 sq. km. moderately dense forests and 11,105 sq. km open forests.

Irrigation

Major and medium irrigation projects had been introduced in the state. So far 8 major and medium irrigation and multipurpose projects have been taken up of which 5 projects viz., Loktak Lift Irrigation Project, Khoupum Dam Project, Imphal Barrage Project, Sekmai Barrage Project and Singda Multipurpose Project have been completed.

Commerce and Industries

Manipur is still an industrially backward state. The handloom industry is by far the largest and most important cottage industry. It improves the socioeconomic conditions of handloom weavers and has attained high degree of excellence. In contrast to other parts of India where weaving is primarily carried out by men, weaving here is entirely the work of women; it forms an integral part of women's domestic duties. Majority of the weavers in the state are self-employed artisans who carry on the profession in their own homes with the assistance of their family members in pre-loom and post-loom process. As per the 4th All India Handloom Census 2019-20, the state registered 2.1 lakh handloom weavers which is 3rd position among the top states of the country. Manipur is, therefore, among the top three states of the country promoting and nurturing the handloom industry for generating employment to a large section of the state's population.

Power

Power supply in Manipur is fully dependent on the Central Generating Stations situated in the North Eastern Region (NER). As the generating stations in the NER are mainly of hydel in nature, during lean period there is a shortfall in generation and therefore the available share of Manipur reduces drastically.

Transport

Roads: Road transport is the most important means of communication in the state. Most of the development activities depend on road transport. There are four national highways—(i) NH-2-Kohima-lmphal-Churachandpur-Selling; (ii) NH-102-lmphal-Moreh; (iii) NH-202 - Imphal-Ukhrul-Jessami; and (iv) NH-37-Imphal-Jiribam besides 2 Asian highways which pass through the state viz. AH-1 and AH-2. The Imphal-Jiribam Road has improved considerably. Construction of the Imphal-Moreh Road is also progressing fast.

Aviation: Bir Tikendrajit International Airport, Imphal is the second largest airport in the NE-region with postal air cargo services. Imphal is well connected with daily flights to Guwahati, Kolkata, Bengaluru and Delhi and other destinations in and outside NE region. Boosting connectivity in the state, for the first time, helicopter services were started in 2018. It is now connecting Imphal with remote district headquarters of Moreh, Jiribam and Tamenglong. The coverage will be expanded to other interior locations soon.

Railways: The state was included in the railway map of India with the opening of a rail head in Jiribam. The Jiribam-Tupul-lmphal railway line in Manipur, a part of the broad-gauge network of the country is on the verge of completion very shortly. The new railway line will connect Imphal with the rest of the country by broad gauge network. The rail project is set to help strengthen India's ties with the ASEAN countries, boost the country's defence and also spur tourism.

Festivals

A year in Manipur represents a cycle of festivals. Hardly a month passes by without a festival which to the Manipuris is a symbol of their social, cultural and religious aspirations. Important festivals of the state are *Lai Haraoba, Rasa Leela, Cheiraoba, Ningol Chak-Kouba, Rath-Jatra, Idul Fitr, Imoinu Iratpa, Gaan-Ngai, Lui-Ngai-Ni, Idul Zuha, Yaoshang (Holi), Durga Puja, Mera Houchongba, Diwali, Kut, Christmas,* etc.

Tourist Centres

Manipur is not only the gateway of the north-eastern region but is also a fascinating destination for discerning tourists. Blessed with a salubrious climate, natural beauty and scenic splendour, the state extends to the tourists a warm welcome. Some important tourist centres in the state are Kangla, Shree Shree Govindajee Temple, Khwalramband Bazar (Ima Keithel), War Cemeteries, Shaheed Minar, Nupi Lan (Women's War) Memorial Complex, Khonghampat Orchidarium, INA Memorial (Moirang), Loktak Lake, Keibul Lamjao National Park, Sendra, Moreh, Siroy Hills, Dzuko Valley, State Museum, Kaina Tourist Home, Khongjom War Memorial Complex, India Peace Memorial (Red Hill), etc.

Government

Governor :	Dr. Najma A. Heptulla	*Chief Secretary :*	Dr. Rajesh Kumar
Chief Minister :	N. Biren Singh	*Jurisdiction of High Court :*	Manipur

Meghalaya

Area	: 22,429 sq. km	*Population*	: 29.67 lakh (prov. 2011 census)
Capital	: Shillong	*Principal Languages*	: Khasi, Garo & English

History and Geography

Meghalaya was created as an autonomous state within the state of Assam in 1970. The full-fledged state of Meghalaya came into existence in 1972. It is bound on the north and east by Assam and on the south and west by Bangladesh. Meghalaya literally means the 'Abode of Clouds' and is essentially a hilly state. It is predominately inhabited by the tribal Khasis, Jaintias and Garos population. The Khasi Hills and Jaintia Hills which form the central and eastern part of the state, forming an imposing plateau with rolling grassland, hills and river valleys. The southern face of the plateau is marked by deep gorges and abrupt slopes, at the foot of which, a narrow strip of plain runs along the international border with Bangladesh.

Carved from the erstwhile state of Assam, Meghalaya became a full-fledged State on January 21,1972. Bounded on the north and east by Assam and on the south and west by Bangladesh, Meghalaya is spread over an area of 22, 429 sq.uare kilometers, and lies between 24° 57' and 26° 10 north latitude and 89° 46' and 92° 53' east longitudes.

Agriculture

Meghalaya is basically an agricultural state with about 81 per cent of its total population depending entirely on it for their livelihood. The hilly terrain and land conditions of the state do not offer much scope in bringing additional area under wet condition, but the state has a vast potential for developing horticulture. The agro-climatic variations offer

much scope for cultivation of temperate as well as tropical fruits and vegetables. Besides the major food crops of rice and maize, the state is also renowned for its horticultural crops like orange, lemon, pineapple, guava, litchi, banana, jackfruits and temperate fruits such as plum, pear, peach, etc. Potato, ginger, turmeric, black pepper, arecanut, tezpata, betel, short-staple cotton, jute, mesta, mustard and rapeseed etc., are some of the important cash crops. Apart from these, the state has achieved success in the cultivation of non-traditional crops like tea, cashew nut, oilseeds, tomato, mushroom, wheat, etc.

Forest

The total forest area is 9,49,56,000 hectares which includes reserved forest, protected forest, national park and unclassed forest. The principal timber species are sal, teak, titachap, gomari, bol, pine, birch and makri-sal. The principal forest products include timber, bamboo, reed, broomstick, cane, ipecac, medicinal herbs and plants, cinnamon and thatch grass. Azaleas and rhododendrons grow wild in the forests of Khasi Hills and Jaintia Hills forest and many kinds of wild and rare orchids are also found in many parts of the state. Pitcher plants, the insect-eating plants of botanical wonder is found in plenty in the Jaintia Hills, West Khasi Hills and South Garo Hills, and it is said that such a plant is found nowhere else in the world. Many rare and interesting plants like wild citrus and pygmy lily are also found.

Wildlife

The state is also rich in wildlife. There are elephants, tigers, bears, wild-boars, leopards, golden cats, leopard cats and jungle cats, deers of various kinds, binturongs, slow loris, monkeys of different types including capped-langurs, golden langurs and hoolock, flying sq.uirrels and giant sq.uirrels. There are also many rare and interesting birds including the hornbills, partridges, pheasants, teals, snipes, geese, ducks and quails. The state has two national parks: Nokrek and Balpakram and two wildlife sanctuaries: Nongkhyllem and Siju.

Industry

The most important non-agro based industry is cement. Because of its rich limestone deposits, the state has a number of cement plants operating in different parts. The number of small-scale industrial units covering service industry, bakeries, furniture making, iron and steel

fabrication, tyre retreading etc., are increasing. The Meghalaya Industrial Development Corporation encourages private entrepreneurs to register themselves so that they may benefit from support and training to set up industries in small and tiny sectors by way of financing and equity participation.

Places of Interest

Meghalaya is dotted with a number of lovely tourist spots. Shillong, the capital city, has a number of beautiful spots. They are the Ward's Lake, the Phan Nonglait Park, the expensive Polo Grounds, the Elephant Falls, the Shillong Peak over looking the city. Umiam, lies 17 km away from Shillong and has been developed into a popular tourist centre in the state. Shillong Peak, an ideal picnic spot rises 1,960 metres above the sea level and is 10 km from the city. Sohra, 56 km from Shillong, is noted for its heavy rainfall. It is 1,300 metres above sea-level. Mawsynram, is situated on the South West of Shillong by the side of Shillong-Mawphlang-Balat road. It closely rivals Sohra in annual rainfall. Jakrem, 64 km from Shillong, is a popular health resort with hot springs of sulphur water, which is believed to have medicinal properties. Ranikor, 140 km from Shillong, is also a place of scenic beauty. Dawki, 96 km from Shillong, is an excellent picnic spot with silver streams and deep waters with magnificient views of the Khasi Hills on one side and Bangladesh on the other.

Transport

Being a hilly state, with 4/5th of the population living in the rural areas, the necessity of proper road network is of utmost importance. The state is not served by railways and river transportation is not feasible. Hence roads are the only means of bulk transportation here.

Roads: Six national highways pass through the state. The state has 9,350 km of road length with road density of 41.69 km per 100 sq.kms.

Aviation: The only airport in the state at Umroi, 35 km from Shillong is functional.

Natural Features

The Khasi Hills and Jaintia Hills which form the central and eastern part of Meghalaya is an imposing plateau with rolling grasslands, hills and river valleys. The southern face of the plateau is marked by deep

gorges and abrupt slopes. At the foot of these slopes, a narrow strip of plain land runs along the international border with Bangladesh.

The Garo hills, which form the western part of Meghalaya, is lower in elevation. The greater part of Garo Hills range in height from 450 m to 600 m and drop steeply to the Brahmaputra valley on the north and to the plains of Bangladesh on the south, Nokrek Peak (1,412m) east of Tura town, is the highest peak in western Meghalaya.

A number of rivers, none of them navigable, reign this mountainous state. In the Garo hills, the Manda, the Damring and the Janjiram flow towards the north while the Ringge and the Ganol flow in the westerly direction. Those that flow to the south are the Simsang, which is the biggest river in Garo hills and the Bhogai.

Website : www.meghalaya.gov.in

Government

Governor :	Satya Pal Malik	*Chief Secretary :*	M. S. Rao
Chief Minister:	Conrad Kongkal Sangma	*Jurisdiction of High Court :*	Meghalaya

Mizoram

Area	: 21,081 sq. km	*Population*	: 10.97 lakh (Prov. 2011 census)
Capital	: Aizawl	*Principal Languages*	: Mizo, English and Lushai

History and Geography

Mizoram is a mountainous region which became the 23rd state of the Indian Union in February 1987. It was one of the districts of Assam till 1972 when it became a Union Territory. After being annexed by the British in 1891, for the first few years, Lushai hills in the north remained under Assam while the southern half remained under Bengal. Both these parts were amalgamated in 1898 into one district called Lushai Hills District under the Chief Commissioner of Assam. With the implementation of North-Eastern Reorganisation Act in 1972, Mizoram became a Union Territory and as a sequel to the signing of the historic

memorandum of settlement between the Government of India and the Mizo National Front in 1986, it was granted statehood in 1987. Sandwiched between Myanmar in the east and the south and Bangladesh in the west, the state occupies an area of great strategic importance in the north-eastern corner of India. Mizoram has a great natural beauty and an endless variety of landscape rich in flora and fauna.

The Mizos came under the influence of the British Missionaries in the 19th century. Now most of the Mizos are Christians. Mizo language has no script of its own. The missionaries introduced the Roman script for the Mizo language and formal education.

Agriculture

About 60 per cent of the people of the state are engaged in agricultural and allied activities. The main pattern of the agriculture followed is *jhum* or shifting cultivation. Of the total 21 per cent is put on paddy/seasonal crops. About 63 per cent of the total crop area is under *jhum* cultivation. To replace the destructive and unproductive *jhum* cultivation with sustainable means of occupation, the state government has launched an innovative programme called the New Land Use Policy covering all the districts. The area under *Jhum* cultivation has decreased from 44,947 hectare at the beginning of 11th Plan to 20,064 hectare during 2014-15 which account for above 55.36 per cent reduction. The significant reduction in *jhum* area is mainly due to the implementation of NLUP, oil palm development programme, sugarcane cultivation programme, RKVY, and RAD.

Horticulture

Owing to the fact that more than 60 per cent of the population depends on land-based activities for their livelihoods, horticulture plays a vital role and occupies very important place in the economy of Mizoram. Because of its advantageous agro-climatic condition, hilly terrain nature of the landscape and well-distributed rainfall during monsoon season horticulture is a sustainable land based activity for development of the economy. Out of the estimated total of 21 lakh hectare of land, 6.30 lakh hectare is available for cultivation of horticulture crops. The main horticulture crops are mandarin orange, banana, passion fruit, grapes, hatkora, pineapple, papaya, etc. and flowers like anthurium, bird of paradise, orchid, chrysanthemum, rose and other subsidiary seasonal

flowers. Spices like ginger, turmeric, black pepper, bird's eye chillies are also grown. A multi-purpose packaging house has been set up at the Horticulture Centre, Chite in collaboration with M/s Argos (Agri Projects) Ltd., Israel.

Floriculture was a growing occupation in Mizoram. Cultivation of anthurium was introduced in 2002 and today anthurium cut flowers are exported outside the state and overseas market. Commercial cultivation of rose under hi-tech green house was introduced in 2006 and about 10,000 rose cut flowers are being harvested everyday.

Forest

Mizoram has one of the highest forest cover among the states of India. India State of Forest Report-2015 indicated that about 91.47 per cent of the state's total geographical area is under forest cover. Tropical semi-evergreen, tropical moist deciduous, sub-tropical broad-leaved hill and subtropical pine forests are the common vegetation types found. Bamboo resources cover around 31 per cent (about 6,446 sq.km) of its geographical area and as many as 35 species of bamboo have been identified in the state of which Melocanna baccifera (mautak) contributes about 77 per cent of the total bamboo coverage.

Jhum cultivation, or slash-and-burn practice, was a historic tradition and a threat to its forest cover. This practice is reduced in recent decades from a government supported initiative particularly New Land Use Policy of the state.

The popular and effective Green Mizoram Programme has been continuing with stress on the survival of the trees planted under which mass afforestation and maintenance activities have been taken up every year. About 4,700 hectares of plantation have also been created under the National Afforestation Programme.

Irrigation

Due to hilly nature of the state, all irrigation projects are confined to minor irrigation. As per estimation of Mizoram Remote Sensing Application Centre, the total Wet Rice Cultivation potential area is 74,644 ha. So far, 439 minor irrigation projects covering 18,228 ha command area have been completed.

Industry

Due to its topographical and geographical disadvantages coupled with underdeveloped infrastructure and transport bottleneck, growth in industry is very modest. However, with the opening up of border trade with Myanmar and Bangladesh, the 'Look/Act East Policy' of the Government of India and the peaceful condition of the state, industrialisation is gaining momentum.

Small industries dominate the industrial scenario acquiring prominent place in the socio-economic development of the state. With the objectives of promoting industries in rural areas, the state government has been running two common facility centre and one Regional Industrial Development Corporation (RIDC) with an intake of 35 trainers.

Scientific cultivation of tea has also been taken up. Establishment of apparel training and design centre, gems cutting and polishing are in the pipeline to encourage setting up of Export Oriented Units (EOUs). Of the cottage industries, handloom and handicraft are given high priority and the two sectors are nourishing to meet consumers' demand in the state and in neighbouring states of Meghalaya, Nagaland, etc.

Power

The bulk power requirement of Mizoram is 201 MW and the allocated share is 103.09 MW (real time power availability is normally 60 MW). Per capita consumption is 280 kWh. The present peak demand is 102 MW but the state generates only about 15 MW from the installed capacity of 29.35 MW. The rest of the requirement has to be imported from various sources like Loktak, Ranganadi, etc from central sector utilities like NEEPCO, NHPC, NTPC, etc.

Transport

Road: Road serves as the most important means of communication, transportation of goods and passengers within the state, inter-state and with international borders. Total road length in the state is 6,349.60 km and road density is 3,00,012 km/ 100 sq. km approximately. There are six national highways passing through the length and breadth of Mizoram. NH 54 connects Aizawl with the rest of the country through Silchar, Assam. Aizawl is also accessible by road from Shillong and Guwahati.

Railways: Broad gauge rail link has been established in Bairabi, Mizoram near Assam border.

Aviation: The airport at Lengpui is connected by flights to and from Kolkata, Imphal and Guwahati. Internal helicopter service also connects Aizawl with Lunglei, Lawngtlai, Saiha, Chawngte, Serchhip, Champhai, Kolasib, Khawzawl, Mamit and Hnahthial.

Festivals

Being predominantly an agricultural community, all the activities of the Mizo centre around *jhum* cultivation. 'Kut' is the Mizo term for festival. Among the various cultural festivals, only three, viz., Chapchar Kut, Mim Kut and Thalfavang Kut are being observed now a days.

Tourist Centres

Mizoram is a place with flora and fauna rich landscape and pleasant climate. Aizawl, the capital city is located at 3,715 ft above sea level, is a religious and cultural centre. Champhai is a beautiful resort on the Myanmar border. Tam Dil, a natural lake with virgin forest, is 76 km from Aizawl and 10 km from the tourist resort of Saitual. Vantawng Falls, 5 km from the town of Thenzawl is the highest and most beautiful waterfall in the state. About 2 km from Vantawng one can find a quaint and beautiful fall known as Tuirihiau. Thenzawl is also the main centre for handlooms. Phawngpui is the highest peak at an elevation of 2,157 m and is a trekker's delight. Just 30 km from Aizawl is located the beautiful Reiek Peak. A typical Mizo village which is a recreation of an old Mizo village is located at Falkawn, 24 km from Aizawl. Hmuifang Tlang about 50 km and Sialsuk Tlang about 66 km from Aizawl respectively are popular tourist destinations. The Department of Tourism has opened tourist lodges in all the bigger towns all over the state and highway restaurants and travellers inns in other township. There is also a recreational centre at Beraw Tlang, Aizawl and Alpine Picnic Hut at district park near Zobawk. Reiek Tlang, where the Tourism Department created a typical Mizo village, is a modern Mizo village resort.

Website : www.mizoram.gov.in

Government

Governor :	P. S. Sreedharan Pillai	*Chief Secretary :*	Pu Lalnunmawia Chuaungo

Chief Minister :	Zoramthanga	*Jurisdiction of : High Court*	Falls under the jurisdiction of Gauhati High Court. There is a Bench at Aizawl.

Nagaland

Area	: 16,579 sq. km	*Population*	: 19.79 lakh (Prov. census 2011)
Capital	: Kohima	*Principal Languages*	: English, Hindi and 16 tribal dialects, Nagamese

History and Geography

Nagaland became the 16th state of the Indian Union in 1963. It is bordered by Myanmar on the east, Arunachal on the north, Assam on the west and Manipur on the south. It lies between the parallels of 98 degree and 96 degree east longitude and 26.6 degree and 27.4 degree latitude north of the equator.

The Naga people belong to the Indo-Mongoloid group of people living in a contiguous areas of the north-eastern hills of India and the upper portion of western Myanmar. The major recognised tribes of Nagaland are Angami, Ao, Chakhesang, Chang, Khiamniungan, Kuki, Konyak, Kachari, Lotha, Phom, Pochury, Rengma, Sangtam, Sumi, Yimchungrii and Zeliang. The Naga languages differ from tribe to tribe and sometimes even from one village to another. They are, however, under the Tibeto-Burman family.

In the 12th and 13th centuries, gradual contacts with the Ahoms of present-day Assam was established but this did not have any significant impact on the traditional Naga way of life. However, in the 19th century, the British appeared on the scene and ultimately the area was brought under British administration. After Independence this territory was made a centrally administered area in 1957, administered by the Governor of Assam. It was known as the Naga Hills Tuensang Area. This failed to quell popular aspirations and polilical unrest began. Hence, in 1961, the area was renamed as Nagaland and given the status of state of the Indian Union, which was formally inaugurated in December 1963.

Agriculture

Nagaland is basically a land of agriculture with about 70 per cent of the population depending on agriculture. The contribution of this sector is very significant. Rice is the staple food. It occupies about 70 per cent of the total area under cultivation and constitutes about 75 per cent of the total food production in the state. The major land use pattern is slash and burn cultivation locally known as *jhum.* Total cultivable area is 7,21,924 hectares.

Forest

Out of the total land area of 16,579 sq. km, forest area occupies approximately 8,62,9.30 sq. km. There are Rangapahar wildlife sanctuaries in Dimapur district, Fakim wildlife sanctuaries in Tuensang district and Singphan wildlife sanctuaries in Mon district, Intanki National Park in Peren district and Zoological Park in Dimapur district.

Power

The state has an installed generation capacity of 27.84 MW only from small hydroelectric power projects against the requirement of 95 MW. The main source of power is from the Central Sector Power allocation.

Irrigation

The state has so far been constructing minor irrigations to divert small hill streams to the valleys and terraced field for rice cultivation covering an area of 82,150 hectares.

Transport

The state is connected to the rest of the country with airport and railway stations at Dimapur and National Highway-29 which passes through the state from Dimapur via Kohima to Manipur. This NH-29 is soon to be an international route under the Look East Policy of the central government. The rest of the state is connected only with roads covering about 24,709 km, this includes the NH-61 and state highways. The state is also inter-connected with postal services in all district headquarters, telephone line and mobile services.

Tourism

With the opening of the state to the international tourists by relaxing the Restricted Area Permit (RAP), a good number of foreign tourists as well as domestic tourists visit Nagaland every year.

The Hornbill festival conceived by the Tourist Department and held in the first week of December is an annual event where all tribes of the state come together to celebrate, exhibit and sell their traditional wares, foodstuffs and crafts. Three traditional festivals, namely *Sekrenyi* at Touphema in Kohima district (Feb), *Monyu* at Pongo in Longleng sub-division (April) and *Moatsu* at Chuchuyimlang in Mokokchung district (May) have been identified as festival destinations.

Music and dances are an intrinsic part of Naga life. Folk songs and ballads eulogizing bravery, beauty, love, generosity, etc., are transmitted from generation to generation. Likewise dancing is an important part of every festive occasion. Feasting, singing, dancing and merry-making invariably accompany festivals. Name of the tribes and their festivals are Angami-Sekrenyi, Ao-Moatsu, Chakhesang-Sukhrunye and Tsukhenye, Chang-Naknyulem, Khiamniungan-Tsokum, Kuki-Mimkut, Konyak-Aoleang Monyu, Kachari-Bushu, Lotha-Tokhu Emong, Phom-Monyu, Pochury-Yemshe, Rengma-Ngada, Sumi-Tuluni, Sangtam-Amongmong, Yimchungru-Metemneo, and Zeliang-Meileingi/Hega Langsimngi/ Chegagadi.

Industries

The state has 17 Citronella Demonstration Farms (i.e. 'Economic Plant'). The Nagaland Handloom and Handicrafts Development Cooperation Ltd, Dimapur, is a state-owned corporation, which is responsible for the promotion and marketing of handloom and handicraft products. An Industrial Growth Centre has been established at Ganeshnagar, Dimapur to facilitate entrepreneurs and educated unemployed youth to promote industries.

Website : www.nagaland.gov.in

Government

Governor	: R. N. Ravi	*Chief Secretary :*	: J. Alam
Chief Minister	: Neiphiu Rio	*Jurisdiction of High Court*	: Falls under Gauhati High Court.

Odisha

Area	: 1,55,707 sq. km	*Population*	: 41,947.358 (2011 census)
Capital	: Bhubaneswar	*Principal Language*	: Odia

History and Geography

The history of Odisha dates back to antiquity, its most famous old names being Kalinga, Utkal and Odra. By the time of Mahavir and Buddha, the Kalinga region on the entire east coast acquired recognition and fame. Mauryan Emperor, Ashoka's invasion of Kalinga was an epoch-making event of ancient times of far reaching consequences. Kalinga was conquered but the conquest changed the heart of the conqueror. The transformation of Ashoka changed the course of religion and cultural history not only of India but also of the whole of Asia. The next great era of Odishan history commenced during the reign of Mahameghavahana Kharavela who ruled in the 1st half of the second century B.C. During Kharavela's reign the empire of Kalinga extended up to the river Ganga in the north and the river Godavari in the south. Subsequently the great dynasties such as the Shailodvabas, Bhoumakaras, Somavamsis, Gangas were not only great empire builders, but also promoters of art, literature and culture. The world famous Sun Temple at Konark was built in the 13th century by Narasimha Deva, the famous Jagannath temple at Puri in the 12th century by Anangabhima Deva and the Lingaraj temple, Bhubaneshwar in the 11 th century by Jajati-ll. Odisha was ruled successively by five Muslim kings till 1592 from mid-16th century, when Akbar annexed it into the Mughal empire. With the decline of the mughal empire, Marathas occupied Odisha. They continued to hold it till the British took over the province in 1803.

Modern Odisha was born in 1936. The state, the land of Lord Jagannath, situated on the shores of Bay of Bengal is surrounded by West Bengal on the north-east, Jharkhand on the north, Chhattisgarh and Telangana on the west and Andhra Pradesh on the south. Its diverse landscape comprises coastal plains, mountainous terrain, plateaus, verdant river valleys and slopes dotted with watersheds, springs, lakes and forest cover of varying density.

Agriculture

The state is slowly moving towards production of high-value crops. The share of cropped area under vegetables, fruits, oilseeds, pulses has increased from 42.37 per cent in 2014-15 to 43.79 per cent in 2018-19.

There has been remarkable increase in production of livestock products like milk, egg and meat. The value of output of vegetables, fruits and livestock products also increased from ₹ 37,204 crore in 2015-16 to ₹ 43,246 crore in 2017-18. Irrigation is vital for sustained agriculture growth. About 61 lakh hectare of irrigation potential was created in 2018-19 compared to 51.8 lakh hectare in 2014-15. Under Paramparagat Krishi Vikas Yojna (PKVY), promotion of organic farming is going on in the state since 2017-18 covering 10 districts like Khurda, Cuttack, Kandhamal, Nayagarh, Kalahandi, Koraput, Rayagada, Sundergarh, Sambalpur and Bargarh. Agriculture and allied sector continues to be important for Odisha contributing 18.9 to the state's Gross Value Added (GVA) in 2018-19. The sector is also a major source of livelihood for majority of the population. As per the latest available estimates for 201 7-18, 48.8 per cent of worker population in the state is engaged in the agriculture sector. Further, the output of the sector forms critical inputs to various agro-based industries, adding to the significance of the sector in the economy.

Irrigation

Irrigation has played a vital role in the growth and development of agriculture in the state. During 2018-19, Irrigation Potential Created (IPC) was 61 lakh hectares, out of which minor schemes (flow and lift) constituted 41 per cent. The major and medium including mega lift irrigation projects created 22 lakh hectares of irrigation and other sources added 13.6 lakh ha. Over the years, IPC recorded increasing trend from 40.96 lakh hectares in 2007-08 to 61 lakh ha in 2018-19, up by 48.9 per cent.

Industry

The industry sector currently leads the developmental change of the state, constituting nearly 40 per cent of state's Gross Value Added (GVA) relative to 30 per cent at the all-India level. The sector has also experienced strong growth in the recent past. The industry sector, due to its linkages with services like transportation, storage, trade and tourism, has the capacity to pass on the growth impetus to the entire economy, truly acting as the growth driver. The fast-growing industrial sector has also increased the visibility of the state at national and international level. Odisha has substantial production of minerals like iron, chromite,

coal and bauxite, making it an ideal location for mining and mineral-based manufacturing. Among large industries, Odisha is the largest producer of stainless steel in India and one of the leading producers of aluminium.

Transport

Roads: Government is implementing different schemes for providing better road connectivity and building infrastructure in rural areas. During 2017-18, about 8,000 kilometers of rural roads and 145 bridges on rural roads to be completed under different schemes such as Biju Setu Yojana, Rural Infrastructure Development Fund, Pradhan Mantri Grama Sadak Yojana and Mukhya Mantri Sadak Yojana. Government has achieved many milestones on road connectivity. On an average, Works Department has improved about 2.1 kilometers of road every day and has completed 20 major bridges every year. About 343 bridges, 9 road over-bridges, 3 flyovers have been completed and 13,090 kilometers of roads have been improved since 2000.

Railways: Government is committed to improve railway density in the state. MoUs with Ministry of Railways for two new projects namely 130 kilometers Jeypore-Malkangiri and 38 kilometers Nabarangpur-Jeypore to bring rail connectivity for the first time to Malkanagiri and Nabarangpur districts have been signed. Government has also offered sharing of 50 per cent of land and construction cost for 32 kilometers of Puri-Konark Railway project.

Ports: Paradeep Port is declared the 8th major port of the country in 1966 by Government of India. It is the only major port in Odisha and the first major port on the East Coast commissioned in Independent India. With 480 kms of coastline, Odisha has 13 potential sites for minor ports development. These are located at Gopalpur, Behuda Muhan and Palur in Ganjam district, Baliharchandi and Astaranga in Puri district, Jatadhar Muhan in Jagatsinghpur district, Inchri, Chandipur, Bahabalpur, Kirtania and Bichitrapur (Talasari) in Balasore district and Dhamra and Chudamani in Bhadrak district. Government of Odisha is making an effort to develop a river port on Mahanadi river near Paradip to boost coastal shipping. Inland Waster Transport (TWT) has vast potential but a small network in Odisha. The passenger launch services are used in

remote areas where other modes of transport are generally lacking. Inland water transport services are provided by the state government.

Aviation: Government has taken proactive steps for implementation of RCS-UDAN Scheme in Utkela and Jeypore Airstrips. Jharsuguda airport is fully developed now.

Power

Energy is the driving force of economic growth either in the form of finite resources such as coal, oil and gas or in renewable forms such as hydroelectric wind solar and biomas or its converted form of electricity. To provide 24x7 quality and uniterrupted power at an affordable rate to the people, the government has developed a comprehensive strategy to augment generation.

Tourism

Odisha is a veritable tourists' paradise, which offers a plethora of opportunities to cater to various tastes and choices in varied forms. The silver beaches of Chandipur, the blue sea of Gopalpur, the exotic and golden beaches of Konark and Puri, red crabs of Talasari beach, attract tourists throughtout the year. Chilika, the largest brackish water inland lake in Asia nestles in the heart of coastal Odisha. Chilika lake, an ecological wonder, is the largest brackish water lagoon in Asia—an important wetland situated in Odisha on the eastern coast of India. Declared a Ramsar site, it is famous for its rich diversity of local and migratory birds. Bhitarkanika is the second largest mangrove eco-system with an area of 672 sq. kms of wildlife sanctuary of which 175 sq. km was declared a national park in 1998, situated in the district of Kendrapara, on the eastern coast of India. Bhitarkanika is one of the most spectacular wildlife sanctuaries and national parks in the country, home to virgin mangrove forests and wetlands. Its rich biodiversity harbours 71 species of mangrove and associated species, 35 species of reptiles, 297 species of birds including international winter migrants from central Asia and Europe and 26 species of mammals including spotted deer, sambar, fishing cats, porcupines and otters, etc.

Website: www.odisha.gov.in

Government

Governor :	Prof. Ganeshi Lal	*Chief Secretary :*	Asit Kumar Tripathy
Chief Minister :	Naveen Patnaik	*Jurisdiction of : High Court*	Odisha

Punjab

Area	: 50,362 sq. km	*Population*	: 2,77,43,338
Capital	: Chandigarh	*Principal Language*	: Punjabi

History and Geography

Ancient Punjab formed part of the vast Indo-lranian region. In later years, it saw the rise and fall of the Mauryas, Bactrians, Greeks, Sakas, Kushans and Guptas. Medieval Punjab saw a supremacy of the Muslims. Ghaznavi was followed by the Ghoris, the slaves, the Khiljis, the Tughlaks, the Lodhis and the Mughals. Fifteenth and sixteenth centuries marked a period of watershed in the history of Punjab. Through teachings of Guru Nanak, Bhakti movement received a great impetus. Sikhism began as a socio-religious movement, which was more interested in fighting evils in religion and society. It was Guru Gobind Singh, the tenth Guru, who transformed the Sikhs into the Khalsa. They rose to challenge tyranny and after centuries of servitude, established a Punjabi Raj based on secularism and patriotism. Maharaja Ranjit Singh, in the works of a Persian writer, changed Punjab from Madam-Kada to Bagh-Bahist (from the abode of sorrow to the garden of paradise). But soon after his death, the entire edifice collapsed due to internal intrigues and British machinations. After two abortive Anglo-Sikh wars, Punjab was finally annexed to the British Empire in 1849.

The fight against the British rule had begun long before Mahatma Gandhi's arrival on the scene. The revolt found expression through the movement of a revivalist or reformist character. First it was the Namdhari sect, which believed in self-discipline and self-rule. Later, it was Lala Lajpat Rai who played a leading role in the freedom movement. Punjab was in the vanguard of India's freedom struggle on all fronts in India and abroad. Punjab's hardships did not end with Independence. It had to face the misery of partition with large-scale bloodshed and

migration. Besides their rehabilitation, there was the task of re-organisation of the state.

Eight princely states of East Punjab were grouped together to form a single state called PEPSU—Patiala and the East Punjab States Union—with Patiala as its capital. PEPSU state was merged with Punjab in 1956 with its capital at Chandigarh. Later in 1966, Haryana was carved out of Punjab. Situated in the north-western corner of the country, Punjab is bound on the west by Pakistan; on the north by Jammu and Kashmir; on the north-east by Himachal Pradesh; and on the south by Haryana and Rajasthan.

Agriculture

Punjab has been a star performer in agriculture during the heydays of the Green Revolution. Agriculture grew at a rate of 5.7 per cent during 1971-72 to 1985-86, which was more than double the all-India growth rate (2.31 per cent during this period). It was this spectacular performance of Punjab, first wheat surpluses followed by steep rise in production of rice, which helped India free itself from the PL 480 food aid and its associated political strings. Punjab played a crucial role in achieving the much-needed food security. However, the state slipped soon after and grew at a lower rate of about 3 per cent between 1986-87 and 2004-05, equivalent to the all-India agricultural growth rate. The agriculture has now reached a sort of plateau in terms of productivity and profitability. The state has about 4.2 million hectares of cultivatable area, which is 3 per cent of the net area sown in the country. It produces about 17.8 per cent of wheat and 11.3 per cent of rice contributed 25-50 per cent of rice and 38-75 per cent of wheat to the central pool of foodgrains over the last four decades. The state ranks 4th in the world in terms of productivity of wheat with 5,183 kg/ha whereas it stands first in India amongst all the other states. It stands third in terms of productivity of rice producing countries after China and Japan.

Horticulture is a high value segment of agriculture. In Punjab, with only 4 per cent of total cropped area, horticulture crops are contributing approx. 10.50 per cent GDP to the total agriculture produce.

Irrigation

The state government has set up a separate Directorate of Ground Water Management under Department of Water Resources (formerly

known as Department of Irrigation). From 2017, keeping in view the need to focus on designing policies, programmes and strategies for the conservation, utilisation and management of groundwater resources of the state, policies have been framed to ensure a judicious, equitable and sustainable manner and optimal utilisation of surface water resources with the objective of conserving water.

Punjab has a canal irrigation infrastructure network of 14,500 km. Through this infrastructure an area of 30.88 lakh hectare is being irrigated. About 12 schemes have been selected under Incentivisation Scheme for Bridging Irrigation Gap of Government of India under which it is proposed to take up work of correction of system deficiencies of canals.

Transport

The Transport Department has established 32 automated driving test tracks where it is mandatory for an applicant to appear for a driving skill test before a driving license is given to him/her. All 22 districts has one test track each at the district headquarters.

The Department also created a Road Safety Fund recently where 50 per cent of the compounding fee of the previous financial year will be available for road safety measures. This is a big step towards making the roads safer and Punjab is one of the few states to have done this. The state has notified a very robust transport scheme with stringent features of road safety and monitoring like RFID and GPS to be made applicable to all stage carriages running in the state.

Punjab Energy Development Agency

The Department of New and Renewable Energy Sources, with its Nodal Agency Punjab Energy Development Agency (PEDA) has installed 1,607.55 MW capacity NRSE power projects out of which 935 MW capacity solar plants have been set up. This initiative also provided direct and indirect employment to approximately 14,500 youths.

Aviation

Punjab has two international airports at Amritsar (Rajasansi) and Mohali. The state has four domestic airports at Ludhiana, Pathankot, Bathinda and Adampur.

Fairs and Festivals

A new cultural policy is in place in the state which aims at creating renewed awareness about the vastly rich culture, traditions and tourist spots of the state thus creating employment opportunities for the exceptionally talented youth. The main aim of framing a cultural as well as tourism policy is to enable the youth of the state to connect with their glorious historical and cultural roots besides making Punjab a numero uno destination in terms of tourism by tapping its enormous potential in the form of various royal palaces, serais, gurudwaras, monuments, etc.

Besides festivals of Dussehra, Diwali, Holi, other important festivals/fairs/ melas are Maghi Mela at Mukatsar, Rural Sports at Kila Raipur, Basant at Patiala, Holla Mohalla at Anandpur Sahib, Baisakhi at Talwandi Sabo, Urs at Rauza Sharif at Sirhind, Chappar Mela at Chappar, Skeikh Farid Aagman Purb at Faridkot, Ram Tirath Mela at Village Ram Tirath, Shaheedi Jor Mela at Sirhind and Harballab Sangeet Sammelan Baba Sodal at Jalandhar. In addition to these, Dimapur, is a state-owned corporation, which is responsible for the promotion and marketing of handloom and handicraft products. An Industrial Growth Centre has been established at Ganeshnagar, Dimapur to facilitate entrepreneurs and educated unemployed youth to promote industries.

Website : www.nagaland.gov.in

Government

Governor	: R. N. Ravi	*Chief Secretary*	: J. Alam
Chief Minister	: Neiphiu Rio	*Jurisdiction of High Court*	: Falls under Gauhati High Court.

Odisha

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Capital	: Bhubaneswar	*Principal Language*	: Odia

History and Geography

The history of Odisha dates back to antiquity, its most famous old names being Kalinga, Utkal and Odra. By the time of Mahavir and Buddha, the Kalinga region on the entire east coast acquired recognition and fame. Mauryan Emperor, Ashoka's invasion of Kalinga was an

epoch-making event of ancient times of far reaching consequences. Kalinga was conquered but the conquest changed the heart of the conqueror. The transformation of Ashoka changed the course of religion and cultural history not only of India but also of the whole of Asia. The next great era of Odishan history commenced during the reign of Mahameghavahana Kharavela who ruled in the 1st half of the second century B.C. During Kharavela's reign the empire of Kalinga extended up to the river Ganga in the north and the river Godavari in the south. Subsequently the great dynasties such as the Shailodvabas, Bhoumakaras, Somavamsis, Gangas were not only great empire builders, but also promoters of art, literature and culture. The world famous Sun Temple at Konark was built in the 13th century by Narasimha Deva, the famous Jagannath temple at Puri in the 12th century by Anangabhima Deva and the Lingaraj temple, Bhubaneshwar in the 11 th century by Jajati-II. Odisha was ruled successively by five Muslim kings till 1592 from mid-16th century, when Akbar annexed it into the Mughal empire. With the decline of the mughal empire, Marathas occupied Odisha. They continued to hold it till the British took over the province in 1803.

Modern Odisha was born in 1936. The state, the land of Lord Jagannath, situated on the shores of Bay of Bengal is surrounded by West Bengal on the north-east, Jharkhand on the north, Chhattisgarh and Telangana on the west and Andhra Pradesh on the south. Its diverse landscape comprises coastal plains, mountainous terrain, plateaus, verdant river valleys and slopes dotted with watersheds, springs, lakes and forest cover of varying density.

Agriculture

Estimated total sown area in the state was 275.76 lakh hectare. Principal crops in the state are wheat, barley, jowar, millet, maize, gram, oilseeds, kharif pulses and cotton. Cultivation of vegetable and citrus fruits such as orange and malta have also picked up over last few years. Red chilies, mustard, cumin seeds and methi are commercial crops.

Industry

Endowed with a rich culture, Rajasthan is also rich in minerals and is fast emerging on the industrial scenario of the country. Some of the important central undertakings are Hindustan Zinc Smelter Plant at Devari (Udaipur), Chanderia (Chittorgarh), Hindustan Copper Plant at

Khetri Nagar (Jhunjhunu), Hindustan Salt Ltd. at Sambhar (Jaipur), HMT Ltd. at Ajmer and Precision Instruments Factory at Kota. Major industries are textiles and woollens, engineering goods, electronic items, automobile, food processing, gems and jewellery, cement, marble slabs and tiles, glass and ceramics, oxygen, zink, fertilisers, railway wagons, ball bearings, water and electricity metres, sulphuric acid, handicraft items, television sets, synthetic yarn, insulators, stainless steel, re-rolling, steel-foundry and insulting bricks. Besides precious and semi-precious stones, caustic soda, calcium carbide, nylon and tyers, etc. are other important industries.

Rajasthan has rich deposits of zinc concentrates, emerald, garnet, gypsum, silver, asbestos, felspar and mica. The state also abounds in exports, so Exports Promotion Industrial Park of the state has been established and made operational at Sitapura (Jaipur) and Boranada (Jodhpur). Inland Container Depots have been established at Jaipur, Bhilwara, Jodhpur and Bhiwadi (Alwar) to promote the exporters. Special Economic Zone for gems and jewellery at Sitapura (Jaipur) and Special Economic Zone for handicraft at Boranada (Jodhpur) have been established and Multipurpose Special Economic Zone "Mahendra World City" has been established in PPP model at Jaipur.

The state has a Single Window Clearances System, an online single point contact to reduce the time and effort involved in seeking various clearances and approvals for their proposed enterprises by investors. Another initiative of the state is the Rajasthan MSME (Facilitation of Establishment and Operation) Act, 2019, under which exemptions are available to MSMEs from approvals and inspection under any Rajasthan law for establishment and operation of enterprise for the period of three years from the date of acknowledgement certificate. Rajasthan recently announced a One-Stop-Shop Facility for investors in the Bureau of Investment Promotion.

Minerals

The state is one of the leading mineral producing states in the country. The state has a glorious heritage in the field of mining and is second only to Jharkhand as regards to mineral wealth. It is referred to as museum of minerals, having resources of both metallic and non-metallic minerals including building stones and also resources of radioactive minerals,

lignite, petroleum and natural gas. Important minerals with which the name of state is associated are non-ferrous metals such as lead-zinc, copper, ferromagnesian metals such as tungsten, a number of industrial minerals and different varieties of dimensional and decorative stones. There are 79 varieties of minerals available out of which 57 are produced commercially. Presently, it is the sole producer of lead-zinc, wollastonite, calcite and selenite and leading producer of silver, gypsum, marble, ochre, ball clay, rock phosphate, cadmium and feldspar in the country. Different varieties of marble, granite, sandstone and Kota stone of the state have a large demand not only in the country but also world over. With the discovery of oil and natural gas in western Rajasthan, the state has become the second highest producer of crude oil after Bombay High.

More than 85 per cent of the country's potash, lead-zinc, silver and wollastonite resources are located in the state. The state possesses substantial share of the total resources of potash (91 per cent); lead-zinc ore (89 per cent); wollastonite (88 per cent); silver ore (87 per cent); gypsum (82 per cent); fuller's earth (74 per cent); diatomite (72 per cent); feldspar (90 per cent); marble (63 per cent); asbestos (59 per cent); copper ore (50 per cent); calcite (50 per cent); talc-soapstone-steatite (49 per cent); granite (20 per cent); ball clay (38 per cent); rock phosphate (30 per cent); fluorite (29 per cent); tungsten ore (27 per cent); laterite (17 per cent); gold ore (primary) (23 per cent); mica (28 per cent); and china clay (19 per cent).

Power

The installed power capacity in the state was 21,016.44 MW up to March 2020 in which 7,277 MW was produced from state owned projects; 853.44 MW from collaboration projects; 2;803.47 MW from the allocation from central power generating stations; 7,026.18 MW from wind, solar and biomass projects; and 3,056.00 MW from private sector projects.

Mahatma Gandhi National Rural Employment Guarantee Scheme

In first phase Mahatma Gandhi National Rural Employment Guarantee Scheme was initiated in six districts—Banswara, Dungarpur, Jhalawar, Karouli, Sirohi and Udaipur. In the second phase, this scheme was initiated in other six districts—Barmer, Chittorgarh, Jaisalmer,

Jalore, Sawai Madhopur and Tonk. In the third phase this scheme was launched in rest of the districts of the state.

Transport

Roads : The estimated total length of roads is 2,68,827 km as on March 31, 2020.

Railways : Jodhpur, Jaipur, Bikaner, Sawai Madhopur, Kota, Bharatpur and Udaipur are main railway junctions. Total length of railway line is 7,227.37 km (6,809.18 km broad gaze, 418.19 km. meter gaze) in the state as in March, 2020.

Jaipur Metro: Jaipur Metro Rail project was conceived in 2010. The first phase of the project, i.e., Phase-1A (Mansarovar to Chandpole) of 9.6 km was completed in a record time of 4 years and a quarter. At that time, it was the fastest implemented project in the country. The said section was opened for public carriage in June 2015. The execution of Jaipur Metro phase-1 A was given to DMRC on deposit basis. This project has many significant features like double story elevated track, single pier stations, rain water harvesting through viaduct, etc. The extension of Phase-1 A, i.e., Phase-1 B from Chandpole to Badi Choupar (2.4 kms) which is an underground section, has been completed.

Aviation : Prominent cities are connected with Jaipur airport under domestic air services in which Delhi, Mumbai, Ahmedabad, Kolkata, Chennai, Hyderabad, Bengaluru, Pune and Guwahati are important domestic air services. International air services are also available for Dubai, Mascut and Sharjah from Jaipur airport.

Festivals

Rajasthan is a land of festivals and fairs, besides the national festivals of Holi, Deepawali, Vijayadashmi, Christmas, etc., auspicious days related to deities of gods and goddesses, saintly figures, folk heroes and heroines are celebrated. Important fairs are Teej; Gangaur; Holi-Dhulandi; Kite and Rajasthan Divas (Jaipur); annual Urs of Ajmer Sherif and Galiakot Pushkar Fair (Ajmer); Ramdevji Cattle Fair (Nagaur); Camel Festival (Bikaner); Desert Festival (Jaisalmer); Beneshwar Fair (Dungarpur); Braj-Holi Festival (Bharatpur); Kailadevi Fair; Shri Mahaveer Fair (Karouli); Ranakpur Festival; Godwar Festival (Pali); Mewar Festival (Udaipur); Summer and Winter Festivals in Mount Abu

(Sirohi); Kajli Teej and Bundi Festival (Bundi); Dussehra Festival and Adventure Festival (Kota); Matsya Festival (Alwar); Marwar Festival (Jodhpur); Chandrabhaga Fair (Jhalawar); Jambheshwar Fair and Koloyat Fair (Nokha Bikaner) and Khatu Shyamji Fair (Khatu-Sikar); etc.

Tourists Centres

Jaipur, Jodhpur, Udaipur, Bikaner, Mount Abu (Sirohi), Ranthambore National Park (Tiger Reserve)-(Sawai Madhopur), Sariska Tiger National Park (Alwar), Keoladeo National Park (Bharatpur), Ajmer, Jaisalmer, Pali, Bundi, Kota, Jhalawar, Shekhawati (Sikar) and Chittorgarh are important places of tourists interest in the state.

Website : www.raiasthan.gov.in

Government

Governor	: Kalraj Mishra	*Chief Secretary*	: Niranjan Kumar Arya
Chief Minister	: Ashok Gehlot	*Jurisdiction of High Court*	: Rajasthan

Sikkim

Area	: 7,096 sq. km	*Population*	: 6.11 lakh (provisional census 2011)
Capital	: Gangtok	*Principal Languages*	: Lepcha, Bhutia, Nepali, Limboo, Sikkimese

History and Geography

The early history of Sikkim starts in the 13th century with the signing of a blood-brotherhood treaty between the Lepcha Chieftain Thekong Tek and Bhutia Chieftain Khye-Bumsa at Kabi Lungtsok in North Sikkim. This follows the historic visit of three revered Lamas to Yuksam in 1641 in West Sikkim where they consecrated Phuntsog Namgyal, a sixth generation descendant of Khye-Bumsa as the first Chogyal of Sikkim, thus heralding the beginning of the Namgyal dynasty in Sikkim. With the march of history, events in Sikkim saw the process of democratisation and became an integral part of the Indian Union in 1975. Sikkim, the land blessed by Guru Padmasambhava during his sojourn to Tibet in 8th

century, are inhabited by people from different communities and live in total harmony. Sikkim is perhaps the most peaceful state of the Indian Union to promote communal harmony, a feat which is much to be expected in a plural society like India.

The world's third highest mountain, Khangchendzonga, is regarded as the guardian deity of Sikkim. Sikkim is one of the 18 biodiversity hotspots in the world. More than 5,000 species of angiosperms are found in the state; nearly one third of the total species of angiosperms are found in the country. There are over 4,500 species of flowering plants; 362 species of ferns and allies; over 550 species of wild orchids; atleast 36 species of rhododendrons besides many variations and wild natural hybrids; 11 species of oaks; 30 species of primulas; 28 bamboos; over 700 species of butterflies; probably thrice as many moths; at least 48 species of freshwater fish; around 50 species of amphibians; over 80 reptiles; 600 species of birds; and around 150 species of mammals in the state.

Rare and globally threatened snow leopard, Tibetan argali sheep, red panda, as well as highest altitude domesticated bovid, the yak, black-necked crane and fairrieanum orchid are some of the important species found here.

Tourism

Situated in the eastern Himalayas, Sikkim is one of the most beautiful states of the Indian Union. It is home to the third highest mountain in the world, Mt. Khangchendzonga which is also worshipped as the guardian deity. It is adorned with snowy mountains, luxuriant forests with exotic flora and fauna, pristine waterfalls, sacred lakes, holy caves, medicinal hot-springs, cascading rivers and gentle streams making it a tourist destination for all seasons. An interlace of mixed culture of various communities residing here, the state celebrates festivals and activities of each other with grand fervour. There are tours for everyone, from those seeking solitude for meditation to the adventurous or those seeking leisure holiday. For the more adventurous, there is trekking in the mountains, river rafting, bird watching, mountain biking, rock climbing, paragliding and angling as well as the mountain flights for experiencing the snow-clad mountains.

Agriculture

In the agriculture sector, the state has made immense breakthrough with the introduction of crops like baby corn, sweet corn, etc., bringing manifold increase in income to the farming community. Focus is on crops which can grow under moisture stress conditions and which have high global demands of the likes of buckwheat, millet and such other cereals.

Horticulture

The production of fruits has increased from 5,250 tonnes to 22,240 recording to growth of 323 per cent. Vegetable production has increased from 22,130 tonnes to 78,820 tonnes registering 256 per cent growth. In floriculture a record growth of 200 ha has been registered with production of over 230 lakh numbers of cut flowers and planting materials.

Irrigation and Power

The Department of Irrigation and Flood Control has covered 3,866.68 hectares of agricultural land in Eleventh Five Year Plan.

Power

The total hydro power potential of Sikkim as assessed by Central Water Commission, is around 8,000 MW. With the view to harness the immense hydro power potential of the state, the Government of Sikkim in the year 2004 constituted the Hydro Committee to examine the various aspects related to hydro power development and make recommendations for early implementation of the hydro power projects.

Transport

Roads: Gangtok is connected by roads with Darjeeling district of West Bengal and also with all the district headquarters within Sikkim. The total road length of the state is 3,672.32 km and 216 bridges, which includes 873.40 km road maintained by the Border Roads Organisation.

Railways and Aviation: The closest railway stations are Siliguri (113 km) and New Jalpaiguri (125 km) connecting Kolkata, Delhi and other important cities and Bagdogra airport. The state has its first airport at Pakyong in East Sikkim. There is a regular helicopter service between Gangtok and Bagdogra.

Information Technology

The state government has made encouraging steps to improve the lives of common people through several IT-oriented projects. To meet the objectives various initiatives have been taken like the establishment of 45 community service centres and state-wide area network all across even in remote areas as a step to bring IT to the grassroot level of people. This has greatly increased the government's interface with the public and enhanced the quality of some state services. CSC in Sherethang which is an achievement for the state government and its citizens, is declared as the highest cyber cafe in the world by the Limca Book of Records.

Website : www.sikkim.gov.in

Government

Governor	: Ganga Prasad	*Chief Secretary*	: S. C. Gupta
Chief Minister	: Prem Singh Tamang	*Jurisdiction of High Court*	: Sikkim

Tamil Nadu

Area	: 1,30,060 sq. km	*Population*	: 7.21 crore (census 2011)
Capital	: Chennai	*Principal Language*	: Tamil

History and Geography

Tamil Nadu has a hoary antiquity. Though early *Sangam* classics throw historical references, it is only from the Pallavas we pass to recorded history. South India had remained under the hegemony of the Cholas, the Cheras and the Pandyas for centuries. The Pallavas held supremacy from about the second quarter of the 4th century AD. They were the originators of the famous Dravidian style of temple architecture. The last Pallava ruler was Aparajita in whose reign the later Cholas under Vijayalaya and Aditya asserted themselves by about the 10th century. At the end of the 11th century, Tamil Nadu was ruled by several dynasties like the Chalukyas, Cholas and Pandyas. In the two centuries that followed, the imperial Cholas gained paramountcy over South India.

Muslims gradually strengthened their position, which led to the establishment of the Bahamani Sultanate, by the middle of the 14th century. At the same time, the Vijayanagar Kingdom quickly consolidated

itself and extended its sway over the whole of South India and at the close of the century, Vijayanagar became the supreme power in South. However, it crumbled at the battle of Talikota in 1564 to the confederate forces of the Deccan Sultans.

Even during the period of the tumultuous confusion that followed the battle of Talikota, European commercial interest had appeared as rivals in the area of South India. The Portuguese, the Dutch, the French and the English came in quick succession and established trading centres known as 'Factories'. East India Company which had established their factory at Masulipatnam, now in Andhra Pradesh, in 1611 gradually annexed territories by encouraging enmity among the native rulers. Tamil Nadu was one of the first of British settlements in India. The state is the successor to the old Madras Presidency which in 1901 covered the bulk of the southern peninsula. The composite Madras state was later reorganised and the present Tamil Nadu was formed.

Tamil Nadu is bound on north by Andhra Pradesh and Karnataka, on west by Kerala, on east by the Bay of Bengal and on south by the Indian Ocean.

Agriculture and Irrigation

Tamil Nadu with 3 per cent of the national water and 4 per cent land share and supports 6 per cent of the population. The state government in an effort to usher in second Green Revolution to double the foodgrain production and triple the farmers' income, had set up a programme for 2019-20. The state had 100 lakh tonne of production for the sixth time in a row and bagged the national Krishi Karman award for five times. 'Collective Farming' a revolutionary concept of the state government, made a remarkable achievement wherein the farmers could purchase/borrow farm machinery. Similarly, integrated farming scheme was introduced as a pilot project in some districts wherein such units benefitted numerous famers.

The state is pioneer in IT initiatives for agriculture and continuing with it, a mobile App - Uzhavan - was launched to provide 15 vital personalised agricultural information.

The state has been implementing 'Per Drop More Crop' as a component under the Pradhan Mantri Krishi Sinchayee Yojana to augment the irrigation facilities. It is the only state extending cent per

cent subsidy to small and marginal farmers and 75 per cent to other farmers.

Tourism

As a veritable treasure-trove of art and culture, the state has always been a great attraction to offer to the tourists. It is the consummate expression of art and culture of past period than elsewhere in the country. The state possesses the glorious sculptures, frescoes and murals adorning walls and pillars, giant temple towers (gopurams). Tamil Nadu has multifarious tourist attractions which include 1,076 km of pristine coastline, more than 30,000 temples and places of worship date back beyond the beginning of the Christian era; waterfalls; wildlife sanctuaries; hill stations; dam sites; arts; exotic culture; beautifully made handicrafts and handlooms; heritage; cuisine; business opportunities; etc.

The state has some of the most remarkable temple architecture in the country and a living tradition of music, dance, folk arts and fine arts. Tamil Nadu is well renowned for its temple towns and heritage sites, monuments, forts, hill stations, waterfalls, national parks, beaches, local cuisine, natural environment and wildlife. It has UNESCO declared World Heritage sites, namely, Shore Temple, Five Rathas, Arjuna's Penance - Mamallapuram, Brahadeeswarar Temple-Thanjavur, Iravatheeswarar Temple - Darasuram, Brahadeeswarar Temple - Gangaikonda Cholapuram and Nilgiri Mountain Railway. Four international airports, namely, Chennai, Madurai, Tiruchirappalli and Coimbatore and two major ports Chennai and Thoothukudi are the major connecting points which connect the state with rest of the country and other parts of the world. The well-connected road facility to tourist places is a boon for the tourists and all these facilities have made Tamil Nadu the most preferable tourist destination in the country.

Social Welfare Prorammes

Social Welfare and Nutritious Meal Programme Department of the state is implementing various welfare schemes for the upliftment of children, women, senior citizens and transgenders.

To promote the education of girls, the Chief Minister's Girl Child Protection Scheme introduced during 1992 was restructured during 2001 with increased financial benefits to the girl children enrolled under this scheme. The girl children who were born on August 1, 2011 or after get

the financial assistance of ₹ 50,000 under scheme-1 and ₹ 25,000 under scheme-ll under this scheme.

Special Homes for Senior Citizens and destitute children in the Integrated Complex has been set up in 2 blocks in each district. For the Welfare of senior citizens, the government has sanctioned ₹ 1.65 crore for the pneumococcal vaccination to the 4,133 senior citizens of Old Age Homes. This initiative is first of its kind in the country. Puratchi Thalaivar MGR Nutritious Meal Programme was introduced in 1982 with the primary objective of improving nutritional standards and health status of children, besides improving the enrolment in the schools and to reduce dropouts. Under this scheme, the children from stds I to X in government schools, governmens-aided schools, local body schools and children studying in national child labour project schools are provided hot cooked meals with egg in the school campus itself. In addition, they are also provided with different variety of meals with egg masala, green gram and Bengal gram and potatoes in order to increase their nutritional value.

Geology and Mining

Minerals form the basic resources for several important industries and contribute substantially to the Gross State Domestic Product and Industrial Growth. Minerals are considered to be the backbone for the economic growth and deemed to be the wealth of the country. The developmental activities of the state and its economic prosperity are reflected by the availability of mineral, wealth and its prudent exploitation.

The state is endowed with several industrial minerals like lignite, limestone, garnet sand, silica sand, quartz and feldspar, graphite, oil and natural gas, magnesite, iron ore, etc., and also common use minor mineral deposits including world-famous black granite and multi-colour granite deposits which enabled in setting up of cement, refractory, glass, ceramic and granite polishing industries.

Transport

Roads: The length of road network in the state is 66,039 km. Of this the national highway is 6,634 km stretch.

Railways : (1) Total length of route km is 3,856 km.

(2) Running Track km as in September 2019 was : 5,266 km

The major stations are: Chennai Central, Tiruchirappalli, Madurai, Tirunelveli, Nagarkoil, Coimbatore, Erode, Salem, Jolarpettai, Katpadi and Arakkonam.

Ports: Major ports are Chennai, Ennore and Thoothukudi. There are 23 declared minor ports which include: Cuddalore, Nagapattinam, Rameswaram, Pamban, Colachel, Kanneyakumari and Valinokkam. There are 16 declared captive minor ports including Kattupalli, Ennore Minor Port, PY-3 Oilfield and Thirukkadaiyur which are operational and others are at various stages of obtaining statutory clearances and development.

Website : www.tn.gov.in

Government

Governor	: Banwarilal Purohit	*Chief Secretary*	: K. Shanmugam
Chief Minister	: Edappadi K. Palaniswami	*Jurisdiction of High Court* :	Tamil Nadu and Puducherry

Telangana

Area	: 1,12,077 sq. km	*Population*	: 3,50,04 lakh (as per 2011 census)
Capital	: Hyderabad	*Principal Languages*	: Telugu and Urdu

In 2014, Telangana was formed as 29th state of India with Hyderabad as its capital. Earlier Telangana was part of Andhra State as per the linguistic re-organisation of states in 1956. Telangana state has 33 districts including Hyderabad, Adilabad, Khammam, Karimnagar, Mahbubnagar, Medak, Nalgonda, Nizamabad, Rangareddy and Warangal.

History of Telangana

The name Telangana refers to the word Trilinga Desa, earned due to the presence of three ancient Shiva temples at Kaleswaram, Srisailam and Draksharamam. A more historical reason is that during the reign of Nizams the region was known as Telugu Angana to differentiate it from the areas where Marathi was spoken. The region has been ruled by great dynasties such as Sathavahanas, Kakatiyas, Chalukyas, Mughals,

Qutubshahis, Asafjahis. The Kakatiyas contributions to architecture are considered very impressive. Among Kakatiyas, Prataparudra was a great ruler who ruled till 1323 AD. The Satavahanas ruled Telangana region for about 400 years right from the 2nd century BC to beyond the 2nd century AD.

There have been several movements to revoke the merger of Telangana and Andhra, major ones occurred in 1969, 1972 and 2009. The movement for a new state of Telangana gained momentum over the decades. In 2009, the Government of India announced the process of formation of the Telangana. Violent protests led by people in the Coastal Andhra and Rayalaseema regions occurred immediately after the announcement, and the decision was put on hold in December 2009. The movement continued in Hyderabad and other districts of Telangana. There have been large-scale strikes, protests and demonstrations coupled with many suicides also demanding separate statehood.

In July 2013, the process of formation of a separate state gained momentum. After various stages, the Bill was placed in the Parliament and in February 2014; Andhra Pradesh Reorganisation Bill was passed by the Parliament for the formation of Telangana state comprising ten districts from north-western Andhra Pradesh.

Geography

Telangana is situated on the Deccan plateau in the central stretch of the eastern seaboard of the Indian Peninsula. It covers 1,14,800 sq. km (44,300 sq. miles). The region is drained by two major rivers, with about 79 per cent of the Godavari river catchment area and about 69 per cent of the Krishna river catchment area, but most of the land is arid due to higher elevation of most of the state compared to rivers. Telangana is also drained by several minor rivers such as the Bhima, the Manjeera and the Musi. The state is surrounded by Maharashtra on north and north-west; Karnataka on the west; Chhattisgarh on the north-east; and Odisha lies on its west.

Agriculture

Rice is the major food crop of the state. Other important crops are tobacco, mango, cotton and sugarcane. The major kharif coarse cereals maize, jowar, bajra, ragi are produced in the state. Out of the total geographical area, 41.58 per cent is under net area sown, 24.07 per cent is

under forests, 9.52 per cent is under current fallow lands, 7.7 per cent is under non-agricultural uses and 5.4 per cent is barren and uncultivable land. Net cropped area is 46.6 lakh hectares. Agriculture production depends upon the distribution of rainfall. The influence of south-west monsoon is predominant.

Arts and Crafts

Handicrafts have been an integral part of the state. The region offers many astounding handicrafts like bidri crafts, banjara needle crafts, dokra metal crafts, nirmal arts, bronze castings, lacquerware, etc. Be it an intricate needle craft or the surprising bronze castings, metal craft or the classic stone craft, Telangana has a wide assortment of handicrafts.

Festivals

'Bathukamma' is a colourful and vibrant festival and this unique festival of flowers stands as a symbol of cultural identity. "Bonalu" is an annual Hindu festival celebrated in the state in which Goddess Mahakali is worshipped. Dussehra, Samakka Saarakka Jaathara, Peerla Panduga, Ramzan are also largely celebrated in Telangana.

Government

Governor	: Dr. T. Soundararajan	*Chief Secretary*	: Somesh Kumar
Chief Minister	: Kalvakuntla Chandrashekar Rao	*Jurisdiction of High Court*	: Telangana

Tripura

Area	: 10,486 sq. km	*Population*	: 36.74 lakh (prov. census 2011)
Capital	: Agartala	*Principal Languages*	: Bengali and Kokborok

History

Tripura has its unique tribal culture and a fascinating folklore. The history of Tripura can be learnt from *Rajmala* chronicles of King Tripura and writings of historians. There are references of Tripura even in the *Mahabharata* and the *Puranas.* According to *Rajmala,* the rulers were

known by the surname *Fa* meaning *father*. There is a reference to rulers of Bengal helping Tripura kings in the 14th century. Kings of Tripura had to face frequent Mughal invasions with varying successes. They defeated the Sultans of Bengal in several battles. Nineteenth century marked the beginning of the modern era in Tripura when King Maharaja Bir Chandra Kishore Manikya Bahadur modelled his administrative set-up on the British India pattern and brought in various reforms. His successors ruled Tripura till October 15, 1949 when the state merged with the Indian Union. Initially, a part 'C' State, it became a centrally administered territory with the Re-organisation of States in 1956. In 1972, Tripura attained the status of a full-fledged state.

Tripura is strategically situated between the river valleys of Myanmar and Bangladesh. Encircled almost on three sides by Bangladesh, it is linked with Assam and Mizoram in the north-east.

Agriculture

The economy of Tripura is primarily dependent on agriculture. About 24 per cent land is being utilised by this sector, and 51 per cent population is dependent on agriculture for their livelihood.

Irrigation

Tripura is predominantly a hilly state having geographical area of 10,49,169 hectare. Amid the undulating terrain, the recently assessed land under cultivation is 2,55,241 hectares. Irrigable land is 1,17,00 hectares.

Tourism

Tripura is a small but picturesq.ue state in the north-eastern region of the country. The area is about 10,491,69 sq. km. To its north, south and south east it has an international boundary with Bangladesh while to its east; it shares a common boundary with two states of Assam and Mizoram. There are 19 ethnic tribes, Bengali, Manipuri and others, inhabiting this panoramic tiny state.

The scenic beauty of Tripura, its rich and varied culture, archaeology and architecture, its handloom and handicraft which is exquisite in colour, excellent in design and craftsmanship, its verdant forests, and lakes, its excellent bracing climatic conditions, its enhancing and abounding floral treasures and panoramic view points and above all its

very hospitable ethnic population are so attractive that anyone who visits the state once cannot resist the temptation to come often.

Website : www.tripura.gov.in

Government

Governor	: Ramesh Bais	*Chief Secretary*	: Manoj Kumar
Chief Minister	: Biplab Kumar Deb	*Jurisdiction of High Court*	: Tripura

Uttarakhand

Area	: 53,483 sq. km	*Population*	: 1.01 crore (census 2011)
Capital	: Dehradun	*Principal Languages*	: Hindi, English, Garhwali, Kumauni

History

Uttarakhand finds mention in the ancient Hindu scriptures as Kedarkhand, Manaskhand and Himavant. The Kushanas, Kunindas, Kanishka, Samudra Gupta, Pauravas, Katuris, Palas, Chandras and Panwars and the British have ruled it in turns. It is often called the Land of the Gods *(Dev Bhoomi)* because of its various holy places and abundant shrines. The hilly regions of Uttarakhand offer pristine landscapes to the tourists. Uttarakhand was earlier a part of the United Province of Agra and Awadh which came into existence in 1902. In 1935, the name of the state was shortened to the United Province. In January 1950, the United Province was renamed as Uttar Pradesh and Uttaranchal remained a part of Uttar Pradesh before it was carved out in 2000. It is incepted as the 27th state of India.

Located in the foothills of the Himalayas, the state has international boundaries with China (Tibet) in the north and Nepal in the east. On its northwest lies Himachal Pradesh while on the south is Uttar Pradesh.

Agriculture

About 90 per cent of the population depends on agriculture. The total cultivated area in the state is 7,67,459 hectare.

Industry and Minerals

The state is rich in mineral deposits like limestone, marble, rock phosphate, dolomite, magnesite, copper graphite, gypsum, etc.

Irrigation and Energy

Agricultural land under irrigation is 5,61,733 hectare. The state has excellent potential for hydropower generation. There are a number of hydroelectric projects on the rivers Yamuna, Bhagirathi, Bhilangana, Alaknanda, Mandakini, Saryu, Gauri, Kosi and Kali generating electricity.

Transport

Roads : The total length of metalled roads is 33,914 km. The length of PWD roads is 25,665 km. The length of roads built by local bodies is 2,674 km.

Railways : The main railway stations are Dehradun, Haridwar, Roorkee, Kotdwar, Kashipur, Udhamsingh Nagar, Haldwani, Ramnagar and Kathgodam.

Aviation : There are air strips at Jolly Grant (Dehradun) and Pantnagar (Udham Singh Nagar). Air strips at Naini-Seni (Pithoragarh), Gauchar (Chamoli) and Chinyalisaur (Uttarkashi) are under construction. Pawan Hans Ltd. is also operating helicopter service from Rudraprayag to Kedarnath for pilgrims.

Festivals

The world-famous *Kumbh Mela/Ardh Kumbh Mela* is held at Haridwar at every twelfth/sixth year interval. Other prominent fairs/festivals are *Devidhura Mela* (Champawat); *Purnagiri Mela* (Champawat); *Nanda Devi Mela* (Almora); *Gauchar Mela* (Chamoli); *Baisakhi* (Uttarkashi); *Magha Mela* (Uttarkashi); *Uttaraini Mela* (Bageshwar); *Vishu Mela* (Jaunsar Bhabar); *Peerane-Kaliyar* (Roorkee); and Nanda Devi Raj Jat Yatra held every twelfth year.

Tourist Centres

Prominent places of pilgrimage/tourist interests are Gangotri, Yamunotri, Badrinath, Kedarnath, Haridwar, Rishikesh, Hemkund Sahib, Nanakmatta, etc. Kailash Mansarovar Yatra can be performed through the Kumaon region. The world-famous Valley of Flowers, Pindari Glacier,

Roop Kund, Dayara Bugyal, Auli and hill stations like Mussoorie, Dehradun, Chakrata, Nainital, Ranikhet, Bageshwar, Bhimtal, Kausani, Lansdowne, etc., are the other tourist destinations.

Website : www.uk.gov.in

Government

Governor	: Baby Rani Maurya	*Chief Secretary*	: Om Parkash
Chief Minister	: Trivendra Singh Rawat	*Jurisdiction of High Court*	: Uttarakhand

Uttar Pradesh

Area	: 2,36,286 sq. km	*Population*	: 19.98 crore (prov. census 2011)
Capital	: Lucknow	*Principal Languages*	: Hindi, Braj, Urdu, Avadhi

History

The history of Uttar Pradesh is very ancient and interesting. It is recognised in the later Vedic Age as Brahmarshi Desha or Madhya Desha. Many great sages of the Vedic times like Bhardwaja, Gautam, Yagyavalkaya, Vashishtha, Vishwamitra and Valmiki flourished in this state. Several sacred books of the Aryans were also composed here. In the 6th century BC Uttar Pradesh was associated with two new religions—Jainism and Buddhism. It was at Sarnath that Buddha preached his first sermon and laid the foundations of his order and it was in Kushinagar in Uttar Pradesh where Buddha breathed his last. Several centres in Uttar Pradesh like Ayodhya, Prayag, Varanasi and Mathura became reputed centres of learning. In the medieval period Uttar Pradesh passed under Muslim rule and led the way to new synthesis of Hindu and Islamic cultures. Ramananda and his Muslim disciple Kabir, Tulsidas, Surdas and many other intellectuals contributed to the growth of Hindi and other languages.

Uttar Pradesh preserved its intellectual excellence even under the British administration. The British combined Agra and Oudh into one province and called it United Provinces of Agra and Oudh. The name was

shortened to the United Provinces in 1935. In January 1950, the United Provinces was renamed as Uttar Pradesh. The state is bounded by Uttarakhand and Himachal Pradesh in the north; Haryana in the west; Madhya Pradesh in the south; and Bihar in the east. Uttar Pradesh can be divided into two distinct regions (i) Southern Hills and (ii) Gangetic Plains.

Agriculture

Agriculture is the main occupation of 66 per cent of the population. The net cultivated area is 165.64 lakh hectare.

Industry and Minerals

There were 6,12,338 small-scale industries involving a total investment of 7,172 crores. Under the public sector, mining of limestone, magnesite, coal, rock phosphate, dolomite and silicon-sand is carried out. The bulk production of minor and some of the major minerals like limestone, silica-sand, magnesite, pyrophyllite and diaspora is mostly with the private sector. Important mineral based industries include large cement plants in Sonebhadra.

Irrigation and Power

UP Power Corporation, UP State Power Generation and UP Hydel Power Corporation had been formed by reorganising UP State Electricity Board. Power is an important input to accelerate the process of economic growth.

Transport

Roads : The total road length of PWD is 2,35,510 km. This includes 3,588 kms of national highways, 6,593 km of state highways, and 2,25,329 of other district roads.

Railways : Lucknow is the main junction of the northern network. Other important railway junctions are Agra, Kanpur, Prayagraj, Mughalsarai, Jhansi, Moradabad, Varanasi, Tundla, Gorakhpur, Gonda, Faizabad, Bareilly and Sitapur.

Aviation : There are airports at Lucknow, Kanpur, Varanasi, Prayagraj, Agra, Jhansi, Bareilly, Hindon (Ghaziabad), Gorakhpur, Sarsawa (Saharanpur) and Fursatganj (Raebarelli).

Festivals

The biggest congregation, perhaps of the world, *Kumbha Mela* is held at Prayagraj every twelfth year and *Ardh Kumbh Mela* every sixth year. *Magh Mela* is also held at Prayagraj in January when the people come in large numbers to have a dip in the holy Sangam. Among other fairs is the fortnight *long Jhoola* fair of Mathura, Vrindavan and Ayodhya, when dolls are placed in gold and silver *jhoolas* or cradles. A dip in the Ganga on Kartik Poornamasi is supposed to be the holiest and there are big congregations at Garhmukteshwar, Soran, Rajghat, Kakora, Bithur, Kanpur, Prayagraj, Varanasi and Ayodhya. A famous cattle fair is held at Bateswar in Agra district. Dewa in Barabanki district has become famous because of the Muslim saint Waris Ali Shah. Besides, important festivals of the Hindus, Muslims, etc., are widely celebrated in the state.

Tourist Centres

Besides ancient places of pilgrimage like Varanasi, Vindhyachal, Ayodhya, Chitrakoot, Prayag, Naimisharanya, Mathura, Vrindavan, Dewa Sharief, Dargah of Sheikh Saleem Chisti in Fatehpur Sikri, Sarnath, Shravasti, Kushinagar, Sankisa, Kampil, Piprahwa and Kaushambi, places like Agra, Ayodhya, Sarnath, Varanasi, Lucknow, Jhansi, Gorakhpur, Jaunpur, Kannauj, Mahoba, Devgarh, Bithur, and Vindhyachal have rich treasures of Hindu and Islamic architecture and culture.

Website : www.up.gov.in

Government

Governor :	Anandiben Patel	*Chief Secretary :*	Rajendra Kumar Tiwari
Chief Minister :	Yogi Adityanath	*Jurisdiction of High Court :*	Uttar Pradesh

West Bengal

Area	: 88,752 sq. km	*Population*	: 9.13 crore (prov. census 2011)
Capital	: Kolkata	*Principal Languages*	: Bangla, Bhojpuri, Urdu, Hindi

History

The name of Bengal or *Bangla* is derived from the ancient kingdom of Vanga, or Banga. However, Stone Age tools dating back 20,000 years have been excavated in the state. The region was settled by Dravidian, Tibet-Burman, and Austro-Asiatic peoples and was a part of the Vanga kingdom of ancient India. It was a part of Magadha empire. It was one of the four main kingdoms of India during the times of Mahaveera and Buddha, and consisted of several *Janapadas.* Bengal was referred to as Gangaridai by the ancient Greeks around 100 BC, meaning, speculatively, a land with the river Ganga in its heart. The first recorded independent King of Bengal was Shashanka, reigning around the early 7th century. After a period of anarchy, the Buddhist Pala dynasty ruled the region for 400 years, followed by a shorter region of the Hindu Sena dynasty.

Islam came to Bengal in 12th century by Sufi missionaries. Later, occasional Muslim raiders reinforced the process of conversion by building mosq.ues, madrassas and Sufi Khanqahh. Bengal was ruled by various Muslim rulers and governors till the Mughal period in the 16th century.

History of modern Bengal begins with the advent of Europeans, more precisely, with the English trading companies. The Battle of Plassey in 1757 changed the course of history when the English first gained a strong foothold in Bengal and India as well. Bengal was partitioned in 1905 to achieve some political returns. The land frontiers touch Bangladesh in the east and are separated from Nepal in the west; Bhutan lies in the north-east; while Sikkim is on the north. On the west are the states of Bihar and Jharkhand, while in the south lies Odisha and the Bay of Bengal washes its southern frontiers.

Agriculture

Agriculture is the main source of income for about 70 per cent of the population. Jute and rice are the principal crops grown in the state, along with tea, maize, tobacco and sugarcane. The net cultivated area (excluding Kolkata metropolitan district) was 52,48,257 hectares in 2018-19.

Industry

The state policy on industrial promotion and economic development welcomes foreign technology and investment, private sector investment in power generation, improvement and upgradation of industrial

infrastructure. The thrust areas are petrochemicals and downstream industries, electronics and information technology, iron and steel, metallurgical and engineering, textile, leather and leather products, food processing, medicinal plants, edible oil, vegetable processing and aquaculture.

Power and Irrigation

Provision of electricity is vital for the socio-economic development as it accelerates economic growth, generates employment, eliminates poverty and is an essential input for human development. The power sector in West Bengal is predominantly thermal in view of the easy and cheaper availability of cost; the state has an adverse hydel-thermal power mix of 3:97. Significant ground has been broken in the renewable energy sector. WBREDA, the nodal agency for implementation of technology demonstration projects in the state, have benefitted a large number of remote villages in the Sundarbans, parts of West Midnapur and Bankura and areas of Malda, Murshidabad. The state's total installed power capacity includes - 5,295 MW thermal power and 1,206.55 MW from renewable sources (including hydel power).

Transport

Transport Department is primarily responsible for providing better transportation facilities both for passengers and goods by way of formulation and implementation of policies and creation of transport-oriented infrastructure. The state transport undertakings are playing a pivotal role in social commitment. The Department has taken some initiatives to improve the scenario like, computerisation of motor vehicles department; road safety schemes; bus stand schemes; TOIP schemes; pollution control; replacement of existing 2-stroke auto rickshaws by 4-stroke auto rickshaws to reduce automobile pollution; replacement of buses of more than 15 years old; etc.

Social Welfare

The state's Department of Women Development and Social Welfare works towards the protection, equity and inclusion of populations that have been historically oppressed, neglected or excluded from development because of their gender, age, disability or situation. This includes women, senior citizens and other marginalised populations such as persons with disabilities, transgenders, homeless and persons with

drug/alcohol addiction. Some of the key welfare programmes are Swasthya Sathi, Kanyashree, Rupashree, Krishak Bandhu, Lok Prasar Prakalpa, Utkarsha Bangla, Yuvashree, Jal Dharo Jal Bharo, Sufal Bangla, Geetanjali, Khadya Sathi, pension scheme for journalists, Banglar Bari and Mission Nirmal Bangla.

Festivals

The state celebrates myriad festivals like the Durga Puja, Poila Baishakh (the Bengali New Year), Rathayatra, Dolyatra or Basanta-Ursab. From Christmas Carnivals to Eid ul-Fitr and Muharram; from Buddha Purnima to the legendary Ganga Sagar Yatra, all are celebtrated with great zeal.

Tourism

West Bengal boasts of artisanal excellence with its extraordinary terracotta work, handloom weaves, heritage sarees and various other unique handicrafts. The state offers an astounding variety of religious places such as the most number of Shaktipeeths in the likes of Kalighat Temple and Tarapith; magnificent temples like Belur Math, Mayapur ISKCON Temple, Hangseshwari Temple and Tarakeshwar Temple; opulent mosq.ues like the Nizamat Imambara and Katra Mosq.ue in Murshidabad, Furfura Sharif and Tipu Sultan Shahi Mosq.ue in Kolkata; Gurdwaras and majestic churches like the Basilica of the Holy Rosary in Bandel, St. John's Church, Lt. Jame's Church (Jora Girja), St. Paul's Cathedral and Church of the Lord Jesus and spectacular; and Buddhist monasteries of Ghoom, Bhutia Busty, Mag-Dhog Yolmowa, Tharpa Choling, Zang Dhok Palri Phodang among others.

The state has no dearth of adventure attractions. From the dense mangroves of Sunderbans for waterway rides to spot a staggering variety of flora and fauna including the famed Royal Bengal Tiger, trek the Himalayan Mountains; or enjoy a safari in the misty forests of Jaldapara, Chilapata.

Website : www.wb.gov.in

Government

Governor	: Jagdeep Dhankhar	*Chief Secretary*	: Alapan Bandopadhay

Chief Minister	: Mamata Banerjee	*Jurisdiction of High Court :*	West Bengal and Andaman & Nicobar Islands

Andaman and Nicobar Islands

Area	: 8,249 sq. km	*Population*	: 3,79,944 (2001 census)
Capital	: Port Blair	*Principal Languages*	: Hindi, Nicobarese, Bengali, Tamil, Malayalam, Telugu

History and Geography

The union territory of the Andaman and Nicobar Islands is situated between 6° and 14° latitude and 92° and 94° longitude. The Islands located north of 10° north latitude are known as Andaman Group of Islands while islands located south of 10° north latitude are called Nicobar Group of Islands. The climate of the Islands can be defined as humid, tropical coastal climate. The Islands receive rainfall from both the south-west and north-east monsoons and maximum precipitation is between May and December.

The original inhabitants of Islands lived in the forests on hunting and fishing. There are four Negrito tribes, viz., Great Andamanese, Onge, Jarawa and Sentinalese in the Andaman Group of Islands and two Mongoloid tribes, viz., Nicobarese and Shompens in the Nicobar Group of Islands.

Agriculture

Out of the geographical area of 8,249 sq.km only 6 per cent, i.e., around 50,000 ha, has been reduced to 47,000 ha (of the Tsunami 2004), is at present under agriculture. Paddy, the main food crop, is mostly cultivated in Andaman Group of Islands, whereas coconut and arecanut are the cash crops of Nicobar Group of Islands. Field crops, namely, pulses, oilseeds and vegetables are grown followed by paddy during rabi season. Different kinds of fruits such as mango, sapota, orange, banana, papaya, pineapple and root crops are grown on hilly land. Spices, viz., pepper, clove, nutmeg and cinnamon are grown under multi-tier cropping system. Rubber, red oil, palm and cashew are grown on a limited scale in these Islands.

Forests

Recorded forest is 7,171 sq. km of the total geographical area of the Islands. Many types of forests are found, such as tropical wet evergreen, tropical semi-evergreen, moist deciduous, littoral mangrove and swamp forests. A large variety of timbers are also found. The most valuable timbers are padauk and gurjan. These species are not found in Nicobar.

Wildlife

There are 96 wildlife sanctuaries, 9 national parks and 1 biosphere reserve in these Islands. Mammals—out of 55 terrestrial and 7 marine mammal species reported so far, 32 species are endemic. Birds—as many as 246 species and sub-species of birds are reported to inhabit these Islands and of these 99 species and sub-species are endemic. Reptiles—there are 76 terrestrial reptiles found here, of these, 24 species are endemic. Marine Life - Islands harbour more than 1,200 species of fish, 359 species of echinoderms, 1,067 species of molusscs and many more lower forms of life. Among vertebrates, dugongs, dolphins, whales, salt water crocodiles, sea turtles, sea snakes, etc., are common. Reefs are mostly fringing type on eastern coast and barrier type on the western coast.

Industry

There are 1,833 registered MSMEs and handicrafts units. Two units are 100 per cent export oriented in the line offish/prawn processing activity. Apart from this, there are shells and wood-based handicraft units. SSI units are engaged in the production of paints and varnishes; mini flour mills; soft drinks and beverages; steel furniture and fixtures; readymade garments; and steel gate grills and structures. MSMEs handicraft units are also engaged in shell crafts, bakery products, rice-milling, furniture-making, etc. The Andaman and Nicobar Islands Integrated Development Corporation in the public sector has spread its wings in the field of tourism, fisheries, industries and industrial financing and functions as authorised agents.

Transport

The Motor Transport Department operates from 14 stations in northern and southern Islands. The Department has a fleet of 264 buses in operation mainly in rural area. Computerised advanced ticketing for ATR express service is in operation since 2007 where advance tickets can be obtained.

Tourism

Andaman and Nicobar Islands have been recognised as an eco-friendly tourist's destination. As a tourist paradise, these Islands have something very special to offer like historic Cellular Jail, Ross and Havelock Islands. The Andaman tropical evergreen rainforests, beautiful silver sandy beaches, serpentine mangrove-lined creeks, marine life abounding in rare species of plants, animals, corals, etc. provide a memorable experience to the tourists. There is a tremendous scope for enjoying nature in the beach resorts, water sports and adventure water sports, adventure tourism like trekking, island camping, nature trail, scuba diving, etc.

Tourism Department runs guest houses in various parts for comfortable accommodation. The important places of tourist interest are Anthropological Museum, Marine Museum, Water Sports Complex, Gandhi Park, North Bay, Viper Island, Ross Island, Chidiya Tapu, (Bird watching), Red Skin Island, Corbyn's Cove Beach, Islands like Neil Island, Havelock Island, Cinque, Little Andaman, Diglipur (Ross and Smith), etc.

The Islands are connected to the mainland by air and sea. There are regular passengership services from Chennai, Kolkata and Visakhapatnam.

Website : www.andaman.gov.in

Government

Lt. Governor	: Admiral D. K. Joshi	*Chief Secretary*	: Chetan B. Sanghi
		Jurisdiction of High Court	: Falls under the jurisdiction of Calcutta High Court

Chandigarh

Area	: 114 sq. km	*Population*	: 10.55 lakh (census 2011)
Capital	: Chandigarh	*Languages*	: Hindi, Punjabi

History and Geography

Chandigarh is a fully grown town of most modern architectural splendour. The city nestles in a picturesq.ue setting in the foothills of Shivalik hills and enjoys the popular epithet the "City Beautiful". Representative of modern architecture and town planning, the city is a creation of the French architect, Le Corbusier. Chandigarh and the area surrounding it, were constituted as a Union Territory on November 1, 1966. It serves as the joint capital of both Punjab and Haryana states. It shares its boundary on north and west by Punjab and on the east and south by Haryana.

Transport

Chandigarh administration comprehending the need for a user-friendly transport system has decided to launch a Mass Rapid Transport System shortly. The UT administration and the state governments of Punjab and Haryana have come together for implementation of the project.

CTU has computerised 70 per cent of its working and is in the process of further computerisation. The undertaking will also install a Global Positioning System to monitor its fleet in a phased manner.

Rural Development

In order to sensitise the poor and weaker sections of the society about the rights and different benefits being extended to them by the State Legal Services Authority, 14 legal awareness seminars have already been organised in different villages of the UT.

Cement concrete paving and underground drains in village Kajheri and Palsora have been completed. About 70 per cent work in village Mauli Jagran has been completed.

Information Technology

Chandigarh has become a role model in using Information Technology to provide fast and user-friendly services to the masses. Under the e-Governance initiatives of the Department, seven more Gram Sampark Centres have been set up in the villages of Dhanas, Khudda Jassu, Kaimbwala, Raipur Khurd, Raipur Kalan, Makhan Majra and Bahlana. Gram Sampark Centres in villages Palsora, Dadu Majra, Hallo Majra, Khuda Alisher, Daria, Mauli Jagran and Maloya are operative. The administration is working on energy conservation. A work order has been

issued to the Tata BP Solar Ltd. for commissioning the Energy Park at the Botanical Garden. Under the solar lighting initiative, all street-lights in the villages would be replaced with solar-based street-lights.

Industries

The administration is developing the Phase-Ill of the industrial area at the revenue estate of village Mauli Jagran.

Tourism

Administration has taken many innovative and novel measures like Wedding Tourism. With the focus on extending efficient medical, educational and entertainment oriented facilities, administration is promoting cinematic tourism, sports tourism and medical tourism in a big way.

Power

Provision of sufficient electricity to all the residents is also getting attention of the administration. To improve the voltage profile and to reduce the load on the power distribution network the electricity wing had planned to add 80 MVAR automatic capacitor banks at various existing 66 KV grid sub-stations located at different points in the periphery of UT. Use of CFL is mandatory in all government buildings. Similarly, all institutional buildings will have to provide solar lighting in their parking spaces within their complexes.

Website: www.chandigarh.gov.in

Government

Administrator	: V.P. Singh Badnore	*Jurisdiction of High Court*	: Punjab and Haryana
Advisor to the Administrator	: Manoj Kumar Parida		

Dadra, Nagar Haveli and Daman and Diu

Area	: 603 sq. km	*Population*	: 5,85,764 lakh
Capital	: Silvassa	*Principal Languages*	: Gujarati, Hindi, English, Portuguese, Konkani, Varli

History and Geography

In order to keep the English at bay and to enlist their support against the Mughals, the Marathas made friends with the Portuguese and signed a treaty in 1 779. According to this historic treaty of friendship, the Maratha-Peshwa agreed that the Portuguese will be allowed to collect revenue from Dadra and Nagar Haveli which consisted of 72 villages, then known as "parganas" in compensation for their loss of a warship called "Santana", which had earlier been captured by the Marathas but not surrendered to the Portuguese inspite of their many entreaties. These territories were earlier ruled by the Koli chiefs who were defeated by the Hindu kings of "Jawhar" and "Ramnagar". The Marathas conquered and annexed these territories to their kingdom. Portuguese rule over the Union Territory lasted until August 2, 1954, and traces of it can still be found. After liberation, the administration was carried out by local body known as Free Dadra and Nagar Haveli Administration till its merger with the Indian Union in 1961. Consequently, the free Dadra and Nagar Haveli administration was succeeded by formal statutory administration headed by an Administrator.

Daman was acquired by the Portuguese from the Shah of Gujarat. They noticed the port of Daman for the first time in 1523. They attacked it several times and finally obtained it in 1559 by means of a treaty with the Shah. Thereafter, it was under the rule of Portuguese till its liberation in 1961. Early in 1535, the Portuguese Governor De Cunha had led his expedition for the capture of the town in Diu, but was defeated by the Sultan. However, around that period, the Gujarat Sultan Bahadur Shah's kingdom was overwhelmed by Mughal invasion. Pressed on by the Mughal king Humayun on one side and the Portuguese at the gates of Diu, Bahadur Shah entered into a treaty with Nuno da Cunha in 1535 who agreed to assist Bahadur Shah against his enemy by land and sea. In turn he received permission to construct a fortress at Diu and a site was granted for this purpose in the harbour. After the Mughal danger receded, the Shah of Gujarat realised his mistake in allowing the Portuguese to construct the fort. Finally Diu was conquered by the Portuguese in 1546 who ruled there till 1961.

Dadra and Nagar Haveli is a land-locked union territory of India, situated at the western coast in the foot-hills of Western Ghats between

the parallels of 20° -0’ and 20°-25’ north and between meridians 72°-50’ and 73°-15’ of longitude east. The territory has hilly terrain especially towards the north-east and east where it is surrounded by ranges of Sahyadri Mountains (Western Hills).The terrain is intersected by the River Daman Ganga and its three tributaries. The river rises in the hill 64 kms. from the Western coast and discharges itself in the Arabian Sea at the port of Daman. Daman district is situated nearly 200 kms north from Mumbai and is surrounded by Valsad district of Gujarat in north, east and south. Daman Ganga river coming from Nasik passes through the middle of Daman district dividing it into two parts namely, Moti Daman and Nani Daman. Diu district is an island on southern portion of Gujarat Peninsula. It is joined with Una district of Gujarat by two bridges over a sea creek.

Daman is bound on the east by Gujarat, on the west by the Arabian Sea, on the north by the Kolak river and on the south by Kalai river. The neighbourhood district of Daman is Valsad in Gujarat. Diu is an island connected by two bridges. The neighbouring district of Diu is Junagarh of Gujarat.

Daman and Diu which was earlier a separate union territory was merged with Dadra and Nagar Haveli in January 2020.

Agriculture

The union territory is a predominantly rural area with about 79 per cent tribal population. It has about 21,115 hectare land under cultivation. Major crop is paddy (Kharif) while Nagli and hill millets are the other crops of the area. Among fruits mango, chiku, banana, etc., are also produced. Forests cover 40 per cent of the total geographical area. Sugarcane cultivation has also been taken up in a big way in the UT. Efforts are afoot to adopt a multiple cropping system in assured irrigated areas. Important field and garden crops are paddy, ragi, bajra, jowar, groundnut, pulses and beans, wheat, banana, sapota, mango, coconut and sugarcane. There are no major forests in the territory.

Irrigation

Prior to liberation of the territory, there was no irrigation facility and cultivators had to fully depend upon rainfall. After the merger with the Indian Union, adequate steps were taken under minor irrigation sector.

About 128 lift irrigation schemes have been completed creating an additional irrigation potential of 1,851 hectare.

Industry and Power

Prior to 1965-66 there was no industry. There were a few traditional craftsmen who used to make pots, leather items, viz., chappals, shoes and some other items of bamboo. Industrial development started on a low-key during 1967-68 with the establishment of an industrial estate under the cooperative sector by Dan Udyog Sahakari Sangh Ltd. Thereafter, three government industrial estates were developed at Silvassa, Masat and Khadoli. With the inception of the economic liberalisation policy, a real boost in industrial development was seen. There are numerous small-scale and medium-scale industries in the UT. Two industrial areas have been developed by Omnibus Industrial Development Corporation at Daman. The other industrial areas are Dabhel, Bhknpore, Kachigam and Kadaiya. All villages have been electrified. Daman and Diu have got adequate power allocation from central sector power stations in the western region.

Transport

The union territory depends heavily on Maharashtra and Gujarat road network as the territory can be accessed only after crossing these two states from Mumbai. Almost all villages are connected with all-weather roads. The rail route from Mumbai to Ahmedabad links Vapi also. Mumbai is the nearest airport. To meet the need of rapid industrialisation, four-lane work has been taken up in Silvassa and adjoining areas, besides other spillover works.

Tourism

Tourism sector has been assigned high priority, keeping in view the dense forest area and favourable climate.

The prominent places of tourist interest are Tadekeshwar Shiva Mandir; Bindrabin; Deer Park at Khanvel; Vanganga Lake and Island Garden; Dadra; and Vanvihar Udhyan; Mini Zoo; Bal Udhyan; Tribal Museum; and Hirvavan Garden at Silvassa. To attract tourists, annual celebration of festivals like Tarpa and World Tourism Day is a regular event.

Important tourist places in Daman are Bom Jesus Church; Our Lady of Sea Church; Our Lady of Remedies Church; Forts of Moti Daman and Nani Daman; Jampore and Devka Beaches; Public Garden at Nani Daman and Moti Daman Jetty; Pergola Garden; Moti Daman; Amusement Park, Devka; Damanganga Tourist Complex, Kachigam; Satya Sagar Udyan; Mirasol Garden; Mirasol Water Park.

In Diu, St. Paul's Church; Diu Fort and Panikota Fort; Nagoa and Chakratirth; and Children's Park at Ghoghla and Summer House are worth seeing.

Festivals

Normally all festivals of Hindus, Muslims and Christians are celebrated in the territory, while tribals celebrate their own festivals. Diwaso is celebrated by Dhodia and Varli tribes and Raksha Bandhan is celebrated by Dhodia tribe. Other festivals include Bhawada amongst Varlis, Koli tribes and Khali Puja by all tribes after harvesting of crops and Gram Devi before harvesting of crops.

Websites: www.dnh.gov.in
www.daman.nic.in
www.diu.gov.in

Government

Administrator	: Praful Khoda Patel
Jurisdiction of High Court	: Falls under Bombay High Court

Delhi

Area	: 1,483 sq. km	*Population*	: 1.68 crore (as per census 2011)
Capital	: Delhi	*Principal Languages :*	Hindi, Punjabi, Urdu and English

History and Geography

Delhi finds prominent reference right from the times of the epic *Mahabharata.* Its control passed from one ruler/dynasty to another, beginning with the Mauryas, Pallavas, Guptas of Central India and then going on to the Turks of Afghan during the 13th to 15th centuries, and

finally to the Mughals in the 16th century. In the latter half of the 18th century and early 19th century, British rule was established in Delhi. In 1911, Delhi became the centre of all activities after the capital was shifted from Kolkata (Calcutta). It was made a Union Territory in 1956. Lying in the northern part of the country, Delhi is surrounded by Haryana on all sides except the east where it borders with Uttar Pradesh. The 69th constitutional amendment is a milestone in Delhi's history as it got a Legislative Assembly with the enactment of the National Capital Territory Act, 1991.

Agriculture

The principal food crops are wheat, bajra, jowar, gram and maize. However, emphasis has now shifted from food crops to vegetables and fruit crops, dairy and poultry farming, floriculture, etc., as these are more remunerative than food crops in the territory.

Directorate of Agricultural Marketing ensures implementation of the provision of Delhi Agricultural Produce Marketing (Regulation) Act, 1998, in order to provide better regulation of marketing of agricultural produce and for establishment of markets for agricultural produce in the National Capital. It also ensures pre-tested quality agricultural produce to the consumers through the desirous packers attached to the State Grading Laboratory of Directorate of Agricultural Marketing under Government of India scheme of promotion of grading under Agmark as perthe provisions of Agricultural Produce Grading and Marketing Act, 1937 as amended in 1986.

Industry

Delhi is not only the largest commercial centre in northern India, but also the largest centre of small industries. These units manufacture a wide variety of items like television, tape recorders, light engineering machines and automobile parts, sports goods, bicycles and PVC goods including footwear, textiles, fertilisers, medicines, hosiery, leather goods, software, etc.

Irrigation and Power

Due to fast urbanisation of the rural areas of Delhi, cultivable command area under irrigation is getting reduced day by day. Two schemes, namely, "Keshopur Effluent Irrigation Scheme Phase-Ill" and

“Improvement and Extension of Effluent Irrigation System from Coronation Treatment Plant” are under execution. As far as irrigation is concerned, total length of Irrigation network is 52.415 km. There are many villages in Delhi such as Madanpur Khadar, Ali, Jaitpur, Burari, Nilothi, Ranhola, Mudka, Tilangpur Kotal, Baprola, Bakkarwala, Dichaon Kalan, Hirankudna and Neelwal in which irrigation is facilitated by this department. The total area of irrigated land is approximately 989.84 hectares and quantum of waste water treated per day used for irrigation is 111.125 MLD.

Delhi has its own generating stations i.e. Gas Turbine Power Station, Pragati Power Station-I and Pragati Power Station-Bawana with total installed capacity of 1,971 MW. The remaining power is drawn from Northern Regional Grid. The transmission system in Delhi is maintained by Delhi Transco Limited. The power distribution in Delhi is served by BSES Rajdhani Power Limited (BRPL); BSES Yamuna Power Ltd. (BYPL); Tata Power Delhi Distribution Limited (TPDDL); Military Engineering Service (MES); and New Delhi Municipal Corporation (NDMC).

Government extended electricity subsidy, irrespective of the load of entire bill amount of domestic consumers utilising up to 200 units in a month and up to ₹ 800 per month to the domestic consumers utilising up to 201 units to 400 units per month during the period from August 1, 2019 to March 31, 2020 and FY 2020-21. Delhi has an installed capacity of 169.099 MW of solar PV systems with 3,600 net meter connections (in August 2020). Delhi DISCOMs have signed power purchase agreement for more than 1,340 MW for solar power and 750 MW for wind power. Delhi is further planning to develop the New Delhi Municipal Corporation (NDMC) region as solar city. The power system of Delhi is robust and is able to meet the ever-increasing power demand of Delhi.

Transport

Delhi is well connected by roads, rail and air with all parts of India. It has three airports—Indira Gandhi International Airport for the international flights, Palam Airport for domestic air services and Safdarjung Airport for training purposes. It has five important railway stations—Delhi Junction, New Delhi Railway Station, Nizamuddin Railway Station, Anand Vihar Railway Station and Sarai Rohilla Railway

Station. Delhi has three interstate bus terminals at Kashmere Gate, Sarai Kale Khan and Anand Vihar.

Keeping in view the rising vehicular pollution and chaotic traffic condition in the city of Delhi, it has been decided to start Mass Rapid Transit System (MRTS) in Delhi. The project is under implementation and it uses the state-of-the-art modern technology. The metro rail project runs in Delhi. Now, Delhi Metro comprises six lines.

Festivals

Delhi as the capital city is a unique amalgamation of various cultures. Every occasion is welcomed with great vigour, making it an event to experience first-hand. Starting from Republic Day, Lohri, Holi, in the first quarter of the year, celebrations extend to Independence Day, Raksha Bandhan, Eid, Dussehra, Navratras, Diwali, ending the year on a grand note with Christmas and New Year. Delhi Tourism and Transportation Development Corporation (DTTDC Ltd) also hosts various events like Garden Tourism Festival (February) and Mango Festival (first week of July) that have become an annual affair. Besides this, DTTDC also organises weekend cultural programmes across its three Dilli Haats (INA, Pitampura, Janakpuri) and the Garden of Five Senses.

Tourist Places

The Capital is home to three UNESCO World Heritage Sites: Humayun's Tomb, Qutab Minar and Red Fort apart from other major tourist places like Purana Qila (Old Fort), Jama Masjid, India Gate, Birla Mandir, Lotus Temple, Akshardham Temple, etc. DTTDC conducts city sight-seeing and excursion tours. The Corporation has three Dilli Haats across the city situated in INA, Janakpuri and Pitampura. Designed with the rural aesthetics in mind, Dilli Haats were conceived with a vision to showcase the rich culture, heritage and handloom arts of the country. The Corporation also runs a Coffee Home which is visited by many. Garden of Five Senses, Kalagram, Azad Hind Gram, Kalam Memorial and Guru Tegh Bahadur Memorial run by the Corporation are other major tourist spots in the city. Signature Bridge on the Yamuna, the newest landmark, was also constructed by DTTDC.

Website : www.delhi.gov.in

Government

Lt . Governor :	Anil Baijal	*Chief Secretary* :	Vijay Kumar Dev
Chief Minister :	Arvind Kejriwal	*Jurisdiction of High Court* :	Delhi

Jammu and Kashmir

Area	: *1,20,355 sq. km	*Population*	: 1.25 crore (2011 census)
Capital	: Srinagar (Summer) Jammu (Winter)	*Principal Languages*	: Urdu, Dogri, Kashmiri, Jammu Pahari, Punjabi, Ladakhi, Balti, Gojri and Dadri

* includes 78,114 sq. km under illegal occupation of Pakistan, 5,180 sq. km illegally handed over by Pakistan to China and 37,555 sq. km under illegal occupation of China. The population figures exclude population of areas under unlawful occupation of Pakistan and China where census could not be taken.

History and Geography

According to the most popular legend that is also recorded in *Rajtarangani* and *Nilmat Purana,* two most authoritative books, Kashmir was once a large lake and it was Kashyap Rishi who drained off the water, making it a beautiful abode. But geologists have their own theory, which says that geographical changes made way for the outflow of water by subsidence of the mountain at Khadianayar, Baramulla and thus emerged the Valley of Kashmir, the paradise on earth. Ashoka introduced Buddhism to Kashmir in the 3rd century BC which was later strengthened by Kanishka. Huns got the control of the valley in the early 6th century. The valley regained freedom in 530 AD but soon came under the rule of the Ujjain empire. After the decline of the Vikramaditya dynasty, the valley had its own rulers. There was a synthesis of Hindu and Buddhist cultures. Lalitaditya (697-738 AD) extended his rule up to Bengal in the east, Konkan in the south, Turkistan in the north-west and Tibet in the north-east. Considered as the most famous Hindu ruler, he was known for constructing beautiful buildings. Islam came to Kashmir during 13th and 14th centuries AD. Zain-ul-Abedin (1420-70) was the most famous Muslim ruler, who came to Kashmir when the Hindu King Sinha Dev fled

before the Tatar invasion. Later, Chaks over-ran Haider Shah, son of Zain-ul-Abedin. They continued to rule till 1586 when Akbar conquered Kashmir. In 1752, Kashmir passed on from the control of the Mughal emperor to Ahmed Shah Abdali of Afghanistan. The valley was ruled by the Pathans for 67 years.

The name of Jammu figures in the *Mahabharata.* The finds of Harappan remains and artefacts of Mauryan, Kushan and Gupta periods at Akhnoor have added new dimensions to its ancient character. The land of Jammu was divided into 22 hill principalities. Raja Maldev, one of the Dogra rulers, conquered many territories to consolidate his kingdom. Raja Ranjit Dev ruled over Jammu from 1 733 to 1 782. His successors were weak and thus Maharaja Ranjit Singh annexed the territory to Punjab. He later handed over Jammu to Raja Gulab Singh, a scion of the old Dogra ruling family, who had grown powerful among Ranjit Singh's governors and had annexed almost the whole of Jammu region. It was governed by Dogra rulers till 1947 when Maharaja Hari Singh signed the *Instrument of Accession* in favour of the Indian Union on October 26, 1947.

Jammu and Kashmir Reorganisation

The Jammu and Kashmir Reorganisation Act, 2019, was enacted (MHA, SO No. 3979 (E) dated November 2, 2019) to provide for reorganisation of the erstwhile state of Jammu and Kashmir into the two union territories—one to be eponymously called Jammu and Kasjmir, and the other Ladakh, Accordingly, the "State Legislature including Legislative Council of the State" has been abolished and shall now onwards be construed as "Legislative Assembly of the Union Territory of Jammu and Kashmir".

The UT occupies 19th rank in the country in population, as per 2011 census. It has two distinct regions, viz., Kashmir and Jammu comprising 20 districts and 6,431 villages. Administratively, the districts are divided into blocks for development purposes. According to the Annual Report of the UT, there are 285 community development blocks.

Transport

Roads: The UT is connected to the rest of the country through just one highway (NH 1A), 400 km stretch (approx.) maintained by Border Roads Organisation (BRO). Under all the ongoing schemes, 1,500 kms of the

road length have been blacktopped. Besides, 165 kms have been metalled and about 132 kms have been shingled/fair weathered. Under Cities and Towns programme, 95 schemes are completed. Under Pradhan Mantri Gram Sadak Yojana programme, 140 schemes stand completed with a road length of 1,600 kms. As railway network is still in its infancy stage, this has rendered the state totally dependent on road connectivity which provides links to the remote areas of the state. The Jammu-Srinagar National Highway (NH1 A) is considered to be the most expensive road for maintenance in the world.

Aviation: There are major airports providing aerial transport. Srinagar airport has been upgraded as international airport (named as Sheikh-ul-Alam Airport), while the facilities at Jammu have also been upgraded.

Agriculture

Agriculture constitutes an important sector of the UT economy as around 70 per cent of the population derive greater part of their income directly or indirectly from this sector. Economy continues to be predominantly agrarian as 49 per cent (2011) of the total working force with 42 per cent as cultivators and 7 per cent as agriculture labourers depend directly on agriculture for their livelihood. Agriculture has a significant contribution in the export of rare produce like saffron, honey and basmati and remains an important source of raw material demanded by many industries.

Irrigation

Irrigation is an essential input of agriculture and is practiced in all parts of the world where rainfall does not provide enough ground moisture. A major constraint to the development of agriculture is the fact that only 50 per cent of the ultimate irrigation potential of the state has been harnessed. The ultimate irrigation potential has been assessed at 1,358 thousand hectare, which includes 250 thousand hectare to be developed through major and medium irrigation and 1,108 thousand hectare through minor irrigation.

Horticulture

Jammu and Kashmir is well known for its horticulture produce both in India and abroad. It offers good scope for cultivation of all types of horticulture crops covering a variety of temperate fruits like apple, pear,

peach, plum, apricot, almonds, cherry and sub-tropical fruits like mango, guava, citrus, litchi, etc. Apart from this, well-known spices like saffron and *zeera* are cultivated in some parts of the state.

Handloom

It is also labour intensive cottage industry having considerable potential for generation of employment opportunities. To give boost to this industry the state government is laying focus on product design and diversification, providing credit facilities, enhancing weavers' productivity through upgradation of skills and use of efficient looms, market access to handloom products.

Power

The UT has harnessed the hydro potential of 3504.90 MW against the estimated potential of 20,000 MW. In addition, five more projects are under implementation.

Urban Development

Under Amrut, 47 projects have been completed and other projects under it are to be completed soon. Under Smart City Mission, 20 projects have been completed till October 2020. Wi-Fi Zones at 8 different places have been established in Jammu City and electromagnetic plastic disintegrator (IRVM's) at 10 locations were established in Srinagar. Under Pradhan Mantri Awaas Yojana-Urban, 2,049 houses were completed and 7,466 houses have been geo-tagged at various stages of construction. Under PM-SAVNIDHI Scheme, 16,396 street vendors have been registered by the line agencies for extending various facilities under the scheme. The UT government launched My Town My Pride programme to reach out the people at the grassroot level in ULBs.

Rural Development

Under Pradhan Mantri Awaas Yojana-Gramin (PMAY-G), 27,911 houses were constructed. Under MGNREGA, 132.64 lakh person days were generated by providing employment to 3.55 lakh households. A 21 - day long Jan Abhiyan (Awami Muhim), was launched in September 2020, which included implementation of its three essential components of Adhikar Abhiyan (Muhim Barai-e-Haqooq), Unnat Gram Abhiyan (Dehi Taraqiyati Muhim) and the Jan Sunwai Abhiyan (Awami Sunwai Muhim). Block Diwas is held on every Wednesday across the union territory at

designated locations in which officers hear the grievances of the common people.

Under Swachh Bharat Mission (G), 483 community sanitary complexes were built.

Health

Jammu and Kashmir Health Scheme, in convergence with AB-PMJAY, aims to provide free-of-cost insurance cover up to ₹ 5 lakhs per household per year. In order to cope with the additional requirement of medical oxygen facilities in the prevailing situation of Covid-19, the government has started installation of oxygen generation plants/manifold gas pipeline system in 37 Covid-19 dedicated health institutions.

Education

Under inclusive education, 42 laptops were distributed among special educators to be used for visually impaired children. These laptops are to be connected with Braille Tactile Readers to provide easy access to internet and digital resources. Besides, 1,496 aids and appliances were distributed to children with special needs. During Covid-19, thrust was given to schemes like community classes, Aao Baat Karein tele-counselling, promoting use of national educational portals like e-Paathshala and (Digital Infrastructure for Knowledge Sharing), DIKSHA. Besides, portals like JK-DIKSHA and Vidya Daan were launched in June 2020. Under Mid-Day Meal Scheme, cooked meals were not served to children due to the pandemic. Instead, dry ration was distributed among the children at their doorstep. Such distribution of dry ration found mention in the World Food Programme Report.

In order to achieve the objective of access and equity in the higher education, 50 new government degree colleges in the uncovered areas of the UT were made operational. The colleges have been provided with IT enabled classrooms, automation of libraries, e-learning facilities, etc. Digital interactive boards and digital indexing of books have been put in place in 54 colleges.

Social Welfare

The government has reached out to approximately 20 lakh people with welfare measures either in cash or in kind or through counselling or awareness programmes/visits. Four per cent reservation has been given to

Pahari speaking people in direct recruitments. In addition, 10 per cent reservation has been extended to economically weaker sections in direct recruitments. About 8.85 lakh beneficiaries (old age, women in distress, physically challenged persons) are provided pension @ ₹ 1,000 per person/month. Approximately 6.5 lakh children in the age of 0-6 years, lactating and pregnant women and out-of-school adolescent girls have been provided supplementary nutrition on monthly basis.

Food Supplies

Under the Pradhan Mantri Garib Kalyan Yojana (PMJKAY), five kilograms of additional foodgrains per person free of cost was provided to the NFSA beneficiaries. Under Aatmanirbhar Bharat Scheme, the government distributed 1,958.349 MTs of rice and 129.984 MTs of pulses among the migrant workers till August 2020. The union territory successfully switched to One Nation One Ration Card in June 2020 with 2.529 MTs of foodgrains distributed through 656 transactions on national portability up to September 2020.

Tourism

Jammu and Kashmir is an important tourist destination and has been a place of attraction for tourists since centuries. The lush green forests, sweet springs, perennial rivers, picturesq.ue alpine scenery and pleasant climate of Kashmir valley—the paradise on earth—has remained an internationally acclaimed tourist destination, whereas Jammu region—the land of temples is attracting a large number of pilgrim tourists and the important destination has been the Shri Mata Vaishno Devi Shrine.

Under Swadesh Darshan Scheme, 11 projects were completed and work is on for another 20. Construction of Tourist Interpretation Centre and TFC at Dargah Hazratbal has also been completed under PRASAD. In the wake of Covid-19 pandemic, an amount of ₹ 5.09 crores was released among the stakeholders related to tourism sector.

Fairs and Festivals

The fairs and festivals are a reflection of diverse cultural and social heritage of the UT. All Hindu, Muslim and Sikh fairs and festivals are celebrated with full vigour and enthusiasm regardless of the religion. Like all parts of India, Jammu and Kashmir also celebrates Diwali, Holi, Eid-ul-Fitr, Eid-ul-Azha, Milad-un-Nabi.

Website : www.jk.gov.in

Government

Lt. Governor	: Manoj Sinha	*Chief Secretary*	: B.V.R. Subrahmanyam
		Jurisdiction of High Court	: Jammu and Kashmir

Lakshadweep

Area	: 30 sq. km	*Population*	: 64 thousand (census 2011)
Capital	: Kavaratti	*Principal Languages*	: Malyalam, Dhivehi (language of Maldives)

History and Geography

Not much is known of the early history of these Islands. The Islands supposed to have been inhabited first by Amini, Andrott, Kavaratti and Agatti. It was earlier believed that the islanders were originally Hindus and later converted to Islam under the influence of Arab traders sometime in the 14th century. But archaeological evidences unearthed indicate that there were Buddhist settlements around the 6th or 7th century. Earliest Muslim converts or settlers pre-date the year 139 AH of the Hijri year (eighth century) of which period grave stones have recently been discovered in Agatti. This would tend to bear out the traditional belief that Islam was brought to the Island by Arab Saint, Ubaidulla in 41 AH.

Probably independent till 16th century, the Islands were driven to seek the assistance of Raja of Chirakal to help them avert establishment of Portuguese domination. This enabled him to establish his authority and, later, the Islands were transferred in *jaggeer* to Ali Raja, head of Moplah community in Cannanore, who later became an independent ruler himself. The Arakkal rule was not popular and in 1787, Tipu Sultan acceded to the petitions of the Northern Islands to annex these Islands. After the fall of Tipu Sultan, the Islands were passed to East India Company but continued to be ruled de facto by the rulers of Cannanore till their ultimate annexation by the British in the early 20th century. In

1956, the Islands were constituted into a single territory and since then, have been directly administered by the Union Government through an administrator. The Laccadives, Minicoy and Amindivi Group of Islands were renamed Lakshadweep in 1973. Lakshadweep, a Group of Coral Islands, consists of 11 inhabited Islands, 16 uninhabited Islands, 3 reefs and 6 submerged sand banks. These lie scattered in the Arabian Sea about 280 km off Kerala coast between 8° and 12° 3' North Latitude and 71 ° and 74° East Longitude.

Lakshadweep, an archipelago consisting of coral islands and reefs, is the smallest union territory of India. These beautiful and unpolluted Islands comprising total landmass area of 32 sq. kms, are surrounded by around 4,200 sq. km territorial sea area. There are 36 islands (3 reefs and 6 submerged sandy banks) in all, of which, 10 are inhabited and scattered in the Arabian Sea at a distance of 220 to 440 kms of the west coast of Kerala. The entire indigenous population has been classified as scheduled tribe. The main occupation of the people is fishing, coconut cultivation and coirtwisting. The islands are designated as restricted area and a permit from the UT administration is required to visit the islands. Kavaratti is the administrative headquarter of the union territory.

Agriculture

Coconut is the only major crop with a production of 60 million nuts per year. The area under cultivation is about 2,689 hectare. Lakshadweep coconut is branded as an organic product. In India, Lakshadweep stands first in coconut production and productivity per hectare is 20,600 and average yield per palm per year is 82 coconuts. The Lakshadweep coconuts are the highest oil content nuts in the world (82 per cent).

Fisheries

Fishing is another major activity. The sea around the Islands is highly productive. The Islands stand first in the country in per capita availability of fish. New Marine Engineering Workshop with upgraded facilities have been setup at Kalpeni island. Run by the Department of Fisheries, its services are being provided to the fishermen of the islands. There is no private workshop in the UT. A fish market has also been constructed by the Department at Kalpeni to handle and sell the fish caught in a hygienic way. About 100 GPS have been procured and issued to fisherman in all

islands at 75 per cent subsidy, for navigation purposes, which help the fishermen to reach specific locations for fishing activities.

Industries

Coconut fibre extraction and conversion into fibre products is the main industry in the Islands. Under Government Sector, there are 7 coir fibre factories, 5 coir production-cum-demonstration centres and 7 fibre curling units, functioning under coir sector. These units produced coir fibre and coir yarn in addition to other coir products like curled fibre, corridor mat, mat and mattings. A few coir twisting units also function in private sector.

Transport

At present, M.V. Kavaratti, M.V. Arabian Sea, M.V. Lakshadweep Sea, M.V. Bharat Seema, M.V. Amindivi and M.V. Minicoy accommodate the passenger traffic in mainland-islands and inter-island sector. Further, three 150 Passenger High Speed Vessels (HSC Parali, HSC Valiyapani and HSC Cheryapani), three 50 Passenger High Speed Vessels (HSC Skip Jack, Hsc Blue Marlin and HSC Black Marlin), one 15 Passenger High Speed Vessel HSC Viringili and two 100 passenger Ferry Vessels (M.V. Kadeeja Beevi and M.V. Hameedath Bee) provide connectivity between inter-island sectors. Moreover three 150 Passenger HSCs also connect island and mainland depending upon the requirements. The cargo transportation from mainland to islands are handled with four cargo barges, M.V. Ubaidulla, M.V. Thinnakara, M.V. Laccadives and M.V. Cheriyam.

The administration operates two Pawan Hans helicopters on charter for the inter-Island service and evacuation of patients from Islands to Kavaratti/ Agatti and mainland. Besides, connectivity is maintained by Indian Airlines between Agatti and Kochi except on Sundays.

Tourist Centres

Tourism is developing into an important industry. Important tourist places are Agatti, Bangaram, Kalpeni, Kadmat, Kavaratti and Minicoy, etc.

Website : www.lakshadweep.gov.in

Government

Administrator	: Praful Patel
Jurisdiction of High Court	: Falls under Jurisdiction of Kerala High Court

Ladakh

Area	: 96,751 sq. km	*Population*	: 2.74 lakh (census 2011)
Capital	: Leh	*Principal Language*	: Ladakhi

The Jammu and Kashmir Reorganisation Act, 2019, was enacted (MHA, SO No. 3979 (E) dated November 2, 2019) to provide for reorganisation of the erstwhile state of Jammu and Kashmir into the two union territories - one to be eponymously called Jammu and Kashmir, and the other Ladakh. The union territory of Ladakh has two districts - Kargil and Leh - with each having its autonomous district council. These councils work with village panchayats to take decisions on economic development, healthcare, education, land use, taxation and local governance. It has its own police force headed by a Director General of Police. Ladakh does not have an elected legislative assembly or chief minister.

History and Geography

Ladakh occupies the westernmost extension of the high and dry Tibetan Plateau in the extreme north of India. The region undoubtedly has been endowed with unique geographical features. Sandwiched between the Karakoram and Zanskar ranges, almost running parallel in a south-east to north-west direction, it is one of the largest districts in the country bordered by Sinkiang in north; Tibet in east; Himachal Pradesh to the south; union territory of Jammu and Kashmir and the Pakistan administered Gilgit-Baltistan to the west. It extends from the Siachen Glacier in the Karakoram range to the north to the main Great Himalayas to the south. Inhabited by people of Indo-Aryan and Tibetan descent, the region stands as one of the most sparsely populated regions. Ladakh is an area that has its own unique history, culture, and traditions. It was and still is the meeting point of the Islamic and Buddhist worlds and of the Tibetan and Indic cultures. Historically, it was a staging post on the formidable trade routes that crossed the Himalayas to connect Central Asia with India and central Tibet. For nearly 900 years, from the middle of the 10th century, Ladakh was an independent kingdom with its ruling dynasties descending from the kings of old Tibet. Nyimagon, a prince of

the royal lineage of central Tibet reached Ladakh at the invitation of Gyapa Cho, a Chieftain of upper Ladakh in 950 CE, who chose Shey as his capital, and extended his kindom from Lo Manthang (Mustang) to the border of Kashmir. Later, he divided his kingdom among his three sons: eldest among them was Palgyi-gon who became the first king of Ladakh. In this way the successive line of hereditary rulers governed Ladakh until it was invaded by the Army of Jammu Raja Gulab Singh under his General Zorawar Singh in the year 1834.

Ladakh enjoyed uninterrupted history of Buddhism over 1,000 years. Buddhism was introduced here before it arrived in Tibet, during the third Buddhist council in Kashmir (272-232 BC) when Emperor Ashoka sent Buddhist missionaries to Ladakh and other parts of Central Asia. The presence of Kharosti inscriptions discovered near Khaltse bridge on the Indus in Lower Ladakh shows that Ladakh was a part of the Kushan Empire before Buddhism was firmly established in the 11th century by Lotsava Rinchen Zangpo, who during the twilight of Buddhism in mainland India was busy in transplanting Buddhist art and culture in the regions of Indian Himalayas as well as western Tibet. In fact, Tibetan cultural renaissance began with Rinchen Zangpo in 11th century. Over the years, the Lamas and the kings of Ladakh had taken great pains in preserving and promoting Buddhist art and culture in Ladakh region.

Agriculture

Agriculture is the main source of livelihood in Ladakh as in the rest of the country. It is a cold desert and its arid climate makes conditions harsh for agriculture. Almost 90 per cent of farmers are dependent on snowmelt water for irrigation.

Irrigation

Being mountainous with arctic desert condition and scanty rainfall, irrigation depends on the eternal glaciers which give birth to number of rivulets. However, efforts are being made to bring more barren land under cultivation by constructing irrigation canals on Indus, Shayok and other tributaries.

Horticulture

Horticulture crops possess the potential to contribute directly and indirectly to the economy and food security of UT. Apricot and apple are

two major fruit crops of Ladakh. It is the biggest apricot producer in India with 62 per cent share. Ladakh also enjoys the cultivation of pear, peach, plum, cherry, walnut, and almond. Ladakh remains the major site for natural seabuckthorn resource with over 70 per cent of the total area 13,000 hectares in the country. Plasticulture such as greenhouse technology has revolutionised the production possibilities in Ladakh.

Handloom

Ladakh has been known for being self-sufficient in the past, wherein the people would grow their own food, build their houses and create their own textiles—be in apparels, carpets, tents and so forth.

Transport

Roads: The UT remains unconnected with rest of the world for almost six months every year. Both national highways Leh-Manali and Leh-Srinagar remain open for six to seven months. An alternative route, e.g., Nimoo-Padum-Darcha, which provides round the year connectivity to Ladakh, is under construction. The government has also sanctioned another ambitious project "Zojila Tunnel" and work has already begun on it. The final location survey of Leh -Manali- Bilaspur Railway track was completed in 2019.

Aviation: Tourism is one of the main economic contributors to the UT. Leh Airport plays a vital role in the blooming tourism industry of Ladakh. As of 2020, tourism industry in Ladakh was worth 600 crore (USD 84 million). Air connectivity is the fastest and easiest way of reaching Ladakh. Ladakh consists of two districts Leh and Kargil and both the districts share a single airport. The Kushok Bakula Rimpoche Airport in Leh is situated at a height of 3,256m (10,682 ft) above mean sea level provides aerial transport to Leh Ladakh.

The existing Leh Airport Terminal covers an area of 4,500 sq. uare meters approx. which is to be replaced by 19,000 suquare meter, 4-star GRIHA rated terminal building with a handing capacity of 20 lakh passengers annually. The airport is connected to 4 major cities—Delhi, Jammu, Srinagar and Chandigarh. There are 4 major airlines currently operating daily flights to Leh namely Airlndia, Spicejet, Vistara and Go Air. During peak seasons, Leh Airport can handle an average of 10-12 flights per day. In the year 2019, the annual monthly passenger footfall

was observed around 75,000. Leh airport is the only means of transportation that provides connectivity throughout the year.

Tourism

Tourism has won wide recognition as an important industry in the UT in view of its potential for creation of employment opportunities and generation of income on a large scale. Tourism industry provides employment to a large number of people engaged in the related sectors like transport, hotels and catering service, cottage industry, etc. Tourism promotes economic activities in the remote areas.

Since its opening for tourism, Ladakh has registered an increasing number of tourists, because of its landscape, culture, tradition environment, etc., and still has much potential for adventure tourism. Chadder trek, ice hockey, polo and mountain biking fall under some adventure tourism in Ladakh.

Fairs and Festivals

Ladakh has a rich culture of celebrating fairs and festivals. Losar festival marks the beginning of the New Year and is considered to be the most important winter festival of Ladakh. During the festival a medley of cultural events, ancient rituals and traditional/folk singing and dance performances are performed collectively by the villagers. Hemis (monastic) Festival among other ritualistic monastic festivals attracts thousands of tourists from around the world. Similarly, Aryan festival, Ladakh Festival, Ladkah Singge Khababs Sindhu Festival among others attract a good number of locals as well as tourists.

Ladakhi Language and Script

The language and script of Ladakh are same as the Tibetan. Both the communities use similar words for soil, water, fire, wind, sky, and a thousand other words and vocabularies. Differences are noticed only in the use of dialects. Within Ladakh, there are different dialects like Ladakhi, Balti, Purgi, Shina and Dardi. And within Leh and Kargil districts, there are region-based dialects but these different names of dialects are on appearance, but in essence, these dialects are branches of same tree, an extension of one language family, because society in Ladakh is not a society of multi-lingual and multi-racial. People of these two districts are bound by one blood and one tongue. A person from

Changthang in Eastern Ladakh can have conversation with a fellow living in Skardo in Baltisatn. In olden days, all these dialects used one script, i.e., Bhoti.

Website : www.ladakh.nic.in

Government

Lt . Governer	: Radha Krishna Mathur
Advisor to the Lt . Governer	: Umang Narula
Jurisdiction of High Court	: Falls under the Jammu and Kashmir High Court

Puducherry

Area	: 490 sq. km	*Population*	: 12.47, 953 (2011 census)
Capital	: Puducherry	*Principal Languages*	: Tamil, Telugu, Malayalam, English and French

History and Geography

The Union Territory of Puducherry, an ex-French enclave, comprises four isolated regions of Puducherry, Karaikal, Mahe and Yanam. Puducherry, the capital of the territory was once the original headquarters of the French Government in India. The French Government handed over the administration of their territories in November 1954. The territories thus handed over were constituted into the Union Territory of Puducherry. Puducherry region is bounded on the east by the Bay of Bengal and on the three sides by Tamil Nadu as a conclave of Cuddalore and Villupuram districts of Tamil Nadu.

Agriculture

In order to enhance the area under pandal cultivation and to improve the production potential, the farmers are encouraged for cultivation of gourd vegetables by providing monetary assistance for erecting permanent pandal structures which remained as a constraint for the farmers due to high initial investment cost. Assistance of 50 per cent subsidy to a maximum of 1 lakh per acre is being provided. It offers

viable option for the vegetable growers to get increased and stable income per unit area. A paradigm shift was noticed when millets were also grown along with paddy.

Industry

The union territory has a total area of 490 sq. km with a total population of 12.47 lakh as per the last census. With its reputation of being an investor-friendly, the union territory has a proven track record of attracting surplus investment and has witnessed vibrant industrial growth over the years. Even though there was some industrial slowdowns for a few years because of the general downturn in the economy, the growth continues. Puducherry has nearly 77 large and 9,067 micro, small and medium enterprises (MSMEs) and with an investment of ₹ 2,994 crores, these industries are deemed to be the lifeblood of economy providing employment to about one lakh people.

Tourism

The old part of the UT is known as Boulevard Town since it is bounded by four boulevards that once constituted the outer limits of the city's fortification. The Boulevard Town presents two distinct architectural styles in the Tamil and French Quarters, which are separated by a canal and unified by a rectilinear grid plan. There are few monumental buildings, and the architectural character of the town is the result of hundreds of traditional-style houses (both in Tamil and French Quarters) that form the unique streetscapes so distinctive of Puucherry. Some must-see sights include Arikanmedu, a famous historical site that was discovered by the Romans in 200 B.C. and is being excavated; Aayi Mandapam, a monument built during the reign of Napoleon III; Eglise De Sacre Coeur De Jesus or Church of Sacred Heart of Jesus, known for its Gothic architecture; and the Mansion of Ananda Rangapillai, a fine specimen of Indo-French architecture that was built in 1 773.

Electricity

The present power requirement of the union territory is met from the power allocations made by the Government of India in various Central Generating Stations (CGS) and from purchase of power from neighbouring State Electricity Boards (TANGEDCO & KSEB). There is a gas-based power plant of capacity 32.5 MW at Karaikal region owned by

the Puducherry Power Corporation Limited to meet the partial requirement of Karaikal region.

Website : www.py.gov.in

Government

Lieutenant Governor	: Dr. Kiran Bedi I.P.S. (Retd.)
Chief Minister	: V. Narayanasamy
Chief Secretary	: Ashwini Kumar
Jurisdiction of High Court	: Falls under jurisdiction of Madras High Court

31 Diary of National Events

January 1, 2020-December 15, 2020

January 2020

- The Election Commission of India organises the 10th National Voters' Day celebrations on January 25 in New Delhi.
- President presents the Pradhan Mantri Rashtriya Bal Puraskar 2020 at Rashtrapati Bhavan.
- India's communication satellite GSAT-30 successfully launched from the Spaceport in French Guiana.
- Direct daily flight operations from Bhubaneshwar to Varanasi marked the 250th route operationalised under the Regional Connectivity Scheme— UDAN.
- National Cyber Crime Reporting Portal inaugurated.
- Winners of Padma Awards in three categories of Padma Vibhushan, Padma Bhushan and Padma Shri announced.

February 2020

- The 34th Surajkund International Crafts Mela in Surajkund, Haryana, gets underway.
- Prime Minister inaugurates the first Khelo India University Games in Odisha via video conferencing.
- First ever helicopter services operationalised from Dehradun's Sahastradhara helipad to Gauchar, and Chinyalisaur under the Regional Connectivity Scheme—UDAN.
- First-ever Khelo India Winter Games held in Leh, Ladakh.

March 2020

- President presents Nari Shakti Puraskar on International Women's Day.

- Shri Shivraj Singh Chouhan takes over as the 17th Chief Minister of Madhya Pradesh.
- Virtual G20 Leaders' Summit was convened to discuss the challenges posed by the outbreak of the Covid-19 pandemic.
- The Department of Posts, Delhi circle, opens the third all-women post office in the national capital.
- The government imposes a 21 -day nationwide lockdown to contain the spread of Coronavirus pandemic.
- Finance Minister announces a ₹ 1.7 trillion economic stimulus plan for poor and migrants hit by the lockdown.

April 2020

- Prime Minister discusses measures to combat Covid-19 with chief ministers of states.
- Union cabinet approved investments to the tune of ₹ 15,000 crore for 'India Covid-19 Emergency Response and Health System Preparedness Package'.
- Union Education Minister launches a week-long 'Bharat Padhe Online' campaign for crowdsourcing of ideas for improving the online education ecosystem of India.

May 2020

- PM CARES (Prime Minister's Citizen Assistance and Relief in Emergency Situations) Fund trust allocated ₹ 3,100 crore for fight against Covid-19.
- India enters the third phase of its nationwide lockdown.
- Finance Minister unveils second and third set of economic stimulus package for small businesses, taxpayers, organised sector, real estate, agriculture and allied activities.
- Prime Minister announces a special economic and comprehensive package of ₹ 20 lakh crore.
- New 177 mandis integrated with the National Agriculture Market (e-NAM) to strengthen agriculture marketing and facilitate farmers to sell their harvested produce through the online portal.

- The 440m long Chamba tunnel under Chardham Pariyojana inaugurated.

June 2020

- Phased re-opening begins in India after 75 days of lockdown.
- PM CARES Fund trust allocated ₹ 2,000 crore for supply of 50,000 Made-in-India ventilators to government-run Covid hospitals in all states/UTs.
- Kushinagar Airport in Uttar Pradesh becomes an international airport.
- Sixth International Day of Yoga with the theme 'Yoga with Family' was celebrated across the country.
- The world's first ever online B.Sc. degree in Programming and Data Science offered by IIT Madras virtually launched.
- India bans 59 Chinese apps for security reasons under Section 69A of the Information Technology Act.
- MyGov Corona helpdesk bagged two awards for Best Innovation for Covid-19 and Society and People's Choice Covid-19 Overall Winner at CogX 2020—a prestigious Global Leadership Summit and festival of Al and Emerging Technology held annually in London.

July 2020

- Prime Minister launches three high throughput Covid-19 testing facilities at the Indian Council of Medical Research (ICMR) at Kolkata, Mumbai and Noida.
- First helicopter service by Pawan Hans was flagged off in Uttarakhand under the UDAN-RCS scheme.
- The first five Indian Air Force Rafale aircraft inducted into the Indian Air Force.

August 2020

- The President of India gives away the National Sports and Adventure Awards, 2020.
- Union Cabinet approves creation of National Recruitment Agency, paving the way for a transformational reform in the recruitment process for central government jobs.

- Former President Bharat Ratna Pranab Mukherjee passes away in New Delhi. *September 2020*
- Prime Minister inaugurates six mega development projects in Uttarakhand under the Namami Gange Mission.
- Union Minister for Food Processing Industries Smt. Harsimrat Kaur resigns from the Union Council of Ministers. Agriculture and Farmers Welfare Minister Narendra Singh Tomar takes over as additional charge.
- Minister of State for Railways Shri Suresh Angadi dies of Coronavirus.

October 2020

- Prime Minister participates in the Ekta Diwas celebrations to commemorate the birth anniversary of Sardar Vallabhbhai Patel at Kevadia, Gujarat. Water aerodrome and the sea-plane service connecting Statue of Unity in Kevadia with Sabarmati riverfront in Ahmedabad inaugurated.
- Union Minister of Consumer Affairs, Food and Public Distribution, Shri Ram Vilas Paswan passes away. Union Minister of Railways Shri Piyush Goel takes over as additional charge.

November 2020

- Prime Minister inaugurates the 3rd Global Renewable Energy Investment Meeting and Expo (RE-Invest 2020) through video conferencing.
- India participates in the 12th BRICS Summit, in a virtual format.
- India blocks 43 mobile apps citing security reasons.
- The nation celebrates Constitution Day, also known as Samvidhan Diwas, on 26th November to commemorate the adoption of the Constitution of India.
- First direct flight operations from Kalaburagi, Karnataka to Hindon Airport, Ghaziabad, Uttar Pradesh begins.

December 2020

- Day Care Therapy Centre facility under Ayurveda, Yoga, and Naturopathy systems for central government employees and pensioners approved by the Ministry of Health and Family Welfare. Private Day Care Therapy centres will also be empanelled under Central Government Health Scheme shortly.
- BrahMos Supersonic Cruise Missile in Anti-Ship mode successfully test fired.
- A high-level ministerial committee for implementation of Paris Agreement on climate change constituted.
- India makes considerable progress in reducing its malaria burden as per the WHO World Malaria Report 2020.
- Foundation stone is laid for the new Parliament Building in New Delhi.
- Ministry of Health and Family Welfare releases the fifth National Family Health Survey for 17 states and five UTs.
- Union Ministry of Information and Broadcasting issues advisory for advertisements related to online gaming and fantasy sports.
- Foundation stone laid in Nagaland for 15 national highway projects with a length of about 266 kms.

32 General Information

Table of Precedence [1]

The Table, with respect to the rank and precedence of the persons named therein as approved by the President, is given as under :

1. President
2. Vice-President
3. Prime Minister
4. Governors of States within their respective States
5. Former Presidents

5A. Deputy Prime Minister

6. Chief Justice of India
   Speaker of Lok Sabha
7. Cabinet Ministers of the Union
   Chief Ministers of States within their respective States
   Deputy Chairman, NITI Aayog
   Former Prime Ministers
   Leaders of Opposition in Rajya Sabha and Lok Sabha

7A. Holders of Bharat Ratna Decoration

8. Ambassadors Extraordinary and Plenipotentiary and High Commissioners of Commonwealth Countries accredited to India
   Chief Ministers of States outside their respective States
   Governors of States outside their respective States
9. Judges of Supreme Court

9A. Chairperson, Union Public Service Commission
   Chief Election Commissioner
   Comptroller & Auditor General of India

10. Deputy Chairman, Rajya Sabha
    Deputy Chief Ministers of States
    Deputy Speaker, Lok Sabha

Members of the NITI Aayog
Ministers of State of the Union (and any other Minister in the Ministry of Defence for defence matters)

11. Attorney General of India Cabinet Secretary
Lieutenant Governors within their respective Union Territories

12. Chiefs of Staff holding the rank of full General or equivalent rank

13. Envoys Extraordinary and Ministers Plenipotentiary accredited to India.

14. Chairmen and Speakers of State Legislatures within their respective States.
Chief Justices of High Courts within their respective jurisdictions

15. Cabinet Ministers in States within their respective States
Chief Ministers of Union Territories and Chief Executive Councillor, Delhi within their respective Union Territories
Deputy Ministers of the Union India_2021_DPD: E published on DPD mobile app

16. Officiating Chiefs of Staff holding the rank of Lieutenant General or equivalent rank

17. Chairman, Central Administrative Tribunal
Chairman, Minorities Commission
Chairperson, National Commission for Scheduled Castes
Chairperson, National Commission for Scheduled Tribes
Chief Justices of High Courts outside their respective jurisdictions
Puisne Judges of High Courts within their respective jurisdictions

18. Cabinet Ministers in States outside their respective States
Chairmen and Speakers of State Legislatures outside their respective States
Chairman, Monopolies and Restrictive Trade Practices Commission
Deputy Chairmen and Deputy Speakers of State Legislatures within their respective States
Ministers of State in States within their respective States
Ministers of Union Territories and Executive Councillors, Delhi, within their respective Union Territories
Speakers of Legislative Assemblies in Union Territories and

Chairman of Delhi Metropolitan Council within their respective Union Territories

19. Chief Commissioners of Union Territories not having Councils of Ministers, within their respective Union Territories
Deputy Ministers in States within their respective States
Deputy Speakers of Legislative Assemblies in Union Territories and Deputy Chairman of Metropolitan Council, Delhi, within their respective Union Territories

20. Deputy Chairman and Deputy Speakers of State Legislatures, outside their respective States
Ministers of State in States outside their respective States
Puisne Judges of High Courts outside their respective jurisdictions

21. Members of Parliament

22. Deputy Ministers in States outside their respective States

23. Army Commanders/Vice-Chief of the Army Staff or equivalent in other services
Chief Secretaries to State governments within their respective States
Commissioner for Linguistic Minorities
Commissioner for Scheduled Castes and Scheduled Tribes
Members, Minorities Commission
Members, National Commission for Scheduled Castes
Members, National Commission for Scheduled Tribes
Officers of the rank of full General or equivalent rank
Secretaries to the Government of India (including officers holding this office ex-officio)
Secretary, Minorities Commission
Secretary, Scheduled Castes and Scheduled Tribes Commission
Secretary to the President
Secretary to the the Vice President
Secretary to the Prime Minister
Secretary, Rajya Sabha/Lok Sabha
Solicitor General
Vice-Chairman, Central Administrative Tribunal

24. Officers of the rank of Lieutenant General or equivalent rank

25. Additional Secretaries to the Government of India
Additional Solicitor General

Advocate Generals of States
Chairman, Tariff Commission
Charge d 'Affaires' and Acting High Commissioners 'a pied' and *ad interim* Chief Ministers of Union Territories and Chief Executive Councillor, Delhi outside their respective Union Territories
Chief Secretaries of State Governments outside their respective States
Deputy Comptroller and Auditor General, Deputy Speakers of Legislative Assemblies in Union Territories and Deputy Chairman, Delhi Metropolitan Council, outside their respective Union Territories
Director, Central Bureau of Investigation
Director General, Border Security Force
Director General, Central Reserve Police Force
Director, Intelligence Bureau
Lieutenant Governors outside their respective Union Territories
Members, Central Administrative Tribunal
Members, Monopolies and Restrictive Trade Practices Commission
Members, Union Public Service Commission
Ministers of Union Territories and Executive Councillors, Delhi, outside their respective Union Territories
Principal Staff Officers of the Armed Forces of the rank of Major General or equivalent rank
Speakers of Legislative Assemblies in Union Territories and Chairman of Delhi Metropolitan Council, outside their respective Union Territories

26. Joint Secretaries to the Government of India and officers of equivalent rank Officers of the rank of Major-GeneraI or equivalent rank

NOTES

Note 1 The order in this Table of Precedence is meant for State and Ceremonial occasions and has no application in the day-to-day business of Government.

Note 2 Persons in the Table of Precedence will take rank in order of the number of the articles. The entries in the same article are arranged

alphabetically. Those included in the same article will take precedence *inter se* according to date of entry into that article. However, where the dignitaries of different States and Union Territories included in the same article are present at a function outside their States or Union Territories and there is difficulty in ascertaining their dates of entry, they may be assigned precedence *inter se* in the alphabetical order of the name of States and Union Territories concerned after those whose precedence is determined according to date of entry into that article.

Note 3 In Article 7, former Prime Ministers will take precedence over the Cabinet Ministers of the Union and the Leaders of Opposition in the Rajya Sabha and the Lok Sabha. The Chief Ministers of States within their respective States will take precedence over the Cabinet Ministers of the Union in official functions held in the respective States.

Note 4 In Article 8 :

(a) Ambassadors Extraordinary and Plenipotentiary and High Commissioners of Commonwealth countries accredited to India will *en bloc* rank above Governors of States outside their respective States.

(b) Governors of States outside their respective States will *en bloc* rank above Chief Ministers of States outside their respective States.

Note 5 The Ministry of External Affairs may assign appropriate ranks to foreign dignitaries and Indian Ambassadors, High Commissioners and Ministers Plenipotentiary during their visit to India.

Note 6 Notwithstanding the procedure laid down in Note 2, the rank *inter se* and precedence of the persons in Article 10 shall be assigned in the following order :

(1) Deputy Chairman, Rajya Sabha
(2) Deputy Speaker, Lok Sabha
(3) Ministers of State of the Union and any other Minister in the Ministry of Defence for defence matters
(4) Deputy Chief Ministers of States
(5) Members of NITI Aayog.

However, the Deputy Chief Ministers of States outside their respective States will always rank below all other dignitaries

figuring in this article.

Note 7 The Chairman of State Legislative Councils will rank above the Speakers of Legislative Assemblies in cases where they were elected on the same date.

Note 8 When Members of Parliament are invited *en bloc* to major State functions, the enclosures reserved for them should be next to the Chief Justice, Speaker of the Lok Sabha, Ambassadors, etc.

Note 9 Speakers of Legislative Assemblies in Union Territories and Chairman of the Delhi Metropolitan Council, Delhi, will take precedence over Ministers and Executive Councillors, included in the same article.

Note 10 In Article 23 :

(a) Secretaries in the Ministry of External Affairs other than the Foreign Secretary, between themselves, will take precedence in the order to their seniority in Grade-I of the Indian Foreign Service and both of them will take precedence after the Foreign Secretary.

(b) Members of the Minorities Commission and the Scheduled Castes and Schedule Tribes Commission will always take precedence over the Secretaries of these Commissions. India_2021_AMAZON: E published on AMAZON

(c) In official functions held at Delhi/New Delhi, Army Commanders/Vice Chief of the Army Staff or equivalent in other Services will always rank after Secretaries to the Government of India.

Note 11 In Article 25 :

(a) Additional Secretaries in the Ministry of External Affairs, among themselves, will take precedence in the order of their seniority in Grade-II of the Indian Foreign Service.

(b) Additional Solicitor General will take precedence above the Advocate General of States.

(c) Lieutenant Governor will take precedence over the Chief Ministers and Chief Executive Councillor, Delhi, and later will take precedence over Speakers of Legislative Assemblies and Chairman, Metropolitan Council, Delhi.

(d) Deputy Speakers of Legislative Assemblies of Union Territories and Deputy Chairman of Delhi Metropolitan Council will take precedence after Ministers of Union Territories and Executive Councillors, Delhi.

Note 12

For the purpose of Article 26, the posts equivalent to the posts of Joint Secretaries to the Government of India will be determined by the Ministry of Home Affairs.

PRESIDENTS OF INDIA [2]

Name	Tenure
Dr. Rajendra Prasad (1884-1963)	January 26, 1950-May 13, 1962
Dr. Sarvepalli Radhakrishnan (1888-1975)	May 13, 1962-May 13, 1967
Dr. Zakir Husain (1897-1969)	May 13, 1967-May 03, 1969
Varahagiri Venkata Giri (1894-1980)	May 03, 1969-July 20, 1969 (Acting)
Justice Muhammad Hidayatullah (1905-1992)	July 20, 1969-August 24, 1969 (Acting)
Varahagiri Venkata Giri (1894-1980)	August 24, 1969-August 24, 1974
Dr. Fakhruddin Ali Ahmed (1905-1977)	August 24, 1974-February 11, 1977
B.D. Jatti (1912-2002)	February 11, 1977-July 25, 1977 (Acting)
Neelam Sanjiva Reddy (1913-1996)	July 25, 1977-July 25, 1982
Giani Zail Singh (1916-1994)	July 25, 1982-July 25, 1987
R. Venkataraman (1910-2009)	July 25, 1987-July 25, 1992
Dr. Shankar Dayal Sharma (1918-1999)	July 25, 1992-July 25, 1997
K.R. Narayanan (1920-2005)	July 25, 1997-July 25, 2002
Dr. A.P.J. Abdul Kalam (1931 -2015)	July 25, 2002-July 25, 2007
Pratibha Devisingh Patil (b-1934)	July 25, 2007-July 25, 2012
Pranab Mukherjee (1935-2020)	July 25, 2012-July 25, 2017
Ram Nath Kovind (b-1945)	July 25, 2017-till date

VICE-PRESIDENTS OF INDIA [3]

Name	Tenure
Dr. Sarvepalli Radhakrishnan (1888-1975)	May 13, 1952-May 12, 1962
Dr. Zakir Hussain (1897-1969)	May 13, 1962-May 12, 1967
Varahagiri Venkata Giri (1894-1980)	May 13, 1967-May03, 1969
Gopal Swarup Pathak (1896-1982)	August 31, 1969-August 30, 1974
B.D. Jatti (1912-2002)	August 31, 1974-August 30, 1979
Justice Muhammad Hidayatullah (1905-1992)	August 31, 1979-August 30, 1984
R. Venkataraman (1910-2009)	August 31, 1984-July 24, 1987
Dr. Shankar Dayal Sharma (1918-1999)	September 03, 1987-July 24, 1992
K.R. Narayanan (1920-2005)	August 21, 1992-July 24, 1997
Krishan Kant (1927-2002)	August 21, 1997-July 21, 2002
Bhairon Singh Shekhawat (1923-2010)	August 19, 2002-July 21, 2007
Mohammad Hamid Ansari (b-1937)	August 11, 2007-August 10, 2017
M. Venkaiah Naidu (b-1949)	August 11, 2017-till date

PRIME MINISTERS OF INDIA [4]

Name	Tenure
Jawaharlal Nehru (1889-1964)	August 15, 1947-May 27, 1964
Gulzari Lal Nanda (1898-1998)	May 27, 1964-June 09, 1964 (Acting)
Lal Bahadur Shastri (1904-1966)	June 09, 1964-January 11, 1966
Gulzari Lal Nanda (1898-1998)	January 11, 1966-January 24, 1966 (Acting)
Indira Gandhi (1917-1984)	January 24, 1966-March 24, 1977
Morarji Desai (1896-1995)	March 24, 1977-July 28, 1979
Charan Singh (1902-1987)	July 28, 1979-January 14, 1980
Indira Gandhi (1917-1984)	January 14, 1980-October 31, 1984
Rajiv Gandhi (1944-1991)	October 31, 1984-December 02, 1989

Vishwanath Pratap Singh (1931-2008)	December 02, 1989-November 10, 1990
Chandra Shekhar (1927-2007)	November 10, 1990-June 21, 1991
P.V. Narasimha Rao (1921-2004)	June 21, 1991-May 16, 1996
Atal Behari Vajpayee (1924-2018)	May 16, 1996-June 01, 1996
H.D. Deve Gowda (b-1933)	June 01, 1996-April 21, 1997
I.K. Gujral (1919-2012)	April 21, 1997-March 19, 1998
Atal Behari Vajpayee (1924-2018)	March 19, 1998 -May 22, 2004
Dr. Manmohan Singh (b-1932)	May 22, 2004-May 26, 2014
Narendra Modi (b-1950)	May 26, 2014-till date

CHIEF JUSTICES OF INDIA [5]

Name	Tenure
Harilal J. Kania	January 26, 1950-November 06, 1951
M. Patanjali Sastri	November 07, 1951-January 03, 1954
Mehr Chand Mahajan	January 04, 1954-December 22, 1954
B.K. Mukherjea	December 23, 1954-January 31, 1956
S.R. Das	February 01, 1956-September 30, 1959
Bhuvneshwar Prasad Sinha	October 01, 1959-January 31, 1964
P.B. Gajendragadkar	February 01, 1964-March 15, 1966
A.K. Sarkar	March 16, 1966-June 29, 1966
K. Subba Rao	June 30, 1966-April 11, 1967
K.N. Wanchoo	April 12, 1967-February 24, 1968
M. Hidayatullah	February 25, 1968-December 16, 1970
J.C. Shah	December 17, 1970-January 21, 1971
S.M. Sikri	January 22, 1971 -April 25, 1973
A.N. Ray	April 26, 1973-January 28, 1977
M.H. Beg	January 29, 1977-February 21, 1978
Y.V. Chandrachud	February 22, 1978-July 11, 1985
P .N. Bhagwati	July 12, 1985-December 20, 1986
R.S. Pathak	December 21, 1986-June 18, 1989
E.S. Venkataramiah	June 19, 1989-December 17, 1989
S. Mukherjee	December 18, 1989-September 25, 1990
Ranganath Misra	September 25, 1990-November 24, 1991

K.N. Singh	November 25, 1991-December 12, 1991
M.H. Kania	December 13, 1991-November 17, 1992
L.M. Sharma	November 18, 1992-February 11, 1993
M.N. Venkatachaliah	February 12, 1993-October 24, 1994
A.M. Ahmadi	October 25, 1994-March 24, 1997
J.S. Verma	March 25, 1997-January 17, 1998
M.M. Punchhi	January 18, 1998-October 09, 1998
A.S. Anand	October 10, 1998-October 31, 2001
S.P. Bharucha	November 01, 2001 -May 05, 2002
B.N. Kirpal	May 06, 2002-November 07, 2002
G.B. Pattanaik	November 08, 2002-December 18, 2002
V. N. Khare	December 19, 2002-May 01, 2004
S. Rajendra Babu	May 02, 2004-May 31, 2004
R.C. Lahoti	June 01, 2004-October 31, 2005
Y.K. Sabharwal	November 01, 2005-January 13, 2007
K.G. Balakrishnan	January 14, 2007-May 11, 2010
S.H. Kapadia	May 12, 2010-September 28, 2012
Altamas Kabir	September 29, 2012-July 18, 2013
P. Sathasivam	July 19, 2013-April 26, 2014
R.M. Lodha	April 27, 2014-September 27, 2014
H.L. Dattu	September 28, 2014-December 02, 2015
T.S. Thakur	December 03, 2015-January 03, 2017
Jagdish Singh Khehar	January 04, 2017-August 27, 2017
Dipak Mishra	August 28, 2017-October 02, 2018
Ranjan Gogoi	October 03, 2018-November 17, 2019
Sharad Aravind Bobde	November 18, 2019-till date

CHIEF ELECTION COMMISSIONERS OF INDIA [6]

Name	Tenure
Sukumar Sen	March 21, 1950-December 19, 1958
K.V. K. Sundaram	December 20, 1958-September 30, 1967
S.P. Sen Verma	October 01, 1967-September 30, 1972
Dr. Nagendra Singh	October 01, 1972-February 06, 1973

T. Swaminathan	February 07, 1973-June 17, 1977
S.L. Shakdhar	June 18, 1977-June 17, 1982
R.K. Trivedi	June 18, 1982-December 31, 1985
R.V. S. Peri Sastri	January 01, 1986-November 25, 1990
Smt V. S. Ramadevi	November 26, 1990-December 11, 1990
T.N. Seshan	December 12, 1990-December 11, 1996
M.S. Gill	December 12, 1996-June 13, 2001
J.M. Lyngdoh	June 14, 2001-February 07, 2004
T.S. Krishna Murthy	February 08, 2004-May 15, 2005
B.B. Tandon	May 16, 2005-June 29, 2006
N. Gopalaswami	June 30, 2006-April 20, 2009
Navin B. Chawla	April 21, 2009-July 29, 2010
S.Y. Quraishi	July 30, 2010-June 10, 2012
V.S. Sampath	June 11, 2012-January 15, 2015
H.S. Brahma	January 16, 2015-April 18, 2015
Nasim Zaidi	April 19, 2015-July 05, 2017
Achal Kumar Joti	July 06, 2017-January 22, 2018
Om Parkash Rawat	January 23, 2018-December 1, 2018
Sunil Arora	December 2, 2018-till date

CABINET SECRETARIES [7]

Cabinet Secretary	From	To
N.R. Pillai	06-02-1950	13-05-1953
Y.N. Sukthankar	14-05-1953	31-07-1957
M.K. Vellodi	01-08-1957	04-06-1958
Vishnu Sahay	01-07-1958	10-11-1960
B.N. Jha	10-11-1960	08-03-1961
Vishnu Sahay	09-03-1961	15-04-1962
S.S. Khera	15-04-1962	18-11-1964
Dharam Vira	18-11-1964	27-06-1966
D.S. Joshi	27-06-1966	31-12-1968
B. Sivaraman	01-01-1969	30-11-1970
T. Swaminathan	01-12-1970	02-11-1972

B.D. Pande	02-11-1972	31-03-1977
N.K. Mukarji	31-03-1977	31-03-1980
S.S. Grewal	02-04-1980	30-04-1981
C.R. Krishnaswamy Rao	30-04-1981	08-02-1985
P.K. Kaul	08-02-1985	22-08-1986
B.G. Deshmukh	23-08-1986	27-03-1989
T.N. Seshan	27-03-1989	23-12-1989
V.C. Pande	23-12-1989	11-12-1990
Naresh Chandra	11-12-1990	31-07-1992
S. Rajgopal	01-08-1992	31-07-1993
Zafar Saifullah	31-07-1993	31-07-1994
Surendra Singh	01-08-1994	31-07-1996
T.S.R. Subramanian	01-08-1996	31-03-1998
Prabhat Kumar	01-04-1998	31-10-2000
T.R. Prasad	01-11-2000	31-10-2002
Kamal Pande	01-11-2002	14-06-2004
B.K. Chaturvedi	14-06-2004	13-06-2007
K.M. Chandrasekhar	14-06-2007	13-06-2011
Ajit Kumar Seth	14-06-2011	13-06-2015
Pradeep Kumar Sinha	13-06-2015	30-08-2019
Rajiv Gauba	30-08-2019	till date

CIVILIAN AWARDS

Bharat Ratna Award

Bharat Ratna is the highest civilian award. It is given in recognition of exceptional service/ performance of the highest order in any field of human endeavour. Since its inception in 1954, 45 persons have been decorated with Bharat Ratna so far. In 2019, the President of India, Ram Nath Kovind, presented Bharat Ratna Awards to Shri Nanaji Deshmukh (Posthumous), Dr. Bhupendra Kumar Hazarika (Posthumous) and Shri Pranab Mukjerjee.

RECIPIENTS OF BHARAT RATNA

S. No.	Name	Awarded in
1.	Chakravarti Rajagopalachari (1878-1972)	1954
2.	Dr. Sarvepalli Radhakrishnan (1888-1975)	1954
3.	Dr. Chandrasekhara Venkata Raman (1888-1970)	1954
4.	Dr. Bhagwan Das (1869-1958)	1955
5.	Dr. Mokshagundam Visvesvaraya (1861 -1962)	1955
6.	Ft. Jawaharlal Nehru (1889-1964)	1955
7.	Ft. Govind Ballabh Pant (1887-1961)	1957
8.	Dr. Dhondo Keshav Karve (1858-1962)	1958
9.	Dr. Bidhan Chandra Roy (1882-1962)	1961
10.	Purushottam Das Tandon (1882-1962)	1961
11.	Dr. Rajendra Prasad (1884-1963)	1962
12.	Dr. Zakir Hussain (1897-1969)	1963
13.	Dr. Pandurang Vaman Kane (1880-1972)	1963
14.	Lal Bahadur Shastri (Posthumous) (1904-1966)	1966
15.	Smt. Indira Gandhi (1917-1984)	1971
16.	Varahagiri Venkata Giri (1894-1980)	1975
17.	Kumaraswamy Kamraj (Posthumous) (1903-1975)	1976
18.	Mother Mary Teresa Bojaxhiu (Mother Teresa) (1910-1997)	1980
19.	Acharya Vinoba Bhave (Posthumous) (1895-1982)	1983
20.	Khan Abdul Ghaffar Khan (1890-1988)	1987
21.	Marudur Gopalan Ramachandran (Posthumous) (1917-1987)	1988
22.	Dr. Bhimrao Ramji Ambedkar (Posthumous) (1891-1956)	1990
23.	Dr. Nelson Rolihlahla Mandela (1918-2013)	1990
24.	Rajiv Gandhi (Posthumous) (1944-1991)	1991
25.	Sardar Vallabhbhai Patel (Posthumous) (1875-1950)	1991
26.	Morarji Ranchhodji Desai (1896-1995)	1991
27.	Maulana Abul Kalam Azad (Posthumous) (1888-1958)	1992
28.	Jehangir Ratanji Dadabhai Tata (1904-1993)	1992
29.	Satyajit Ray (Posthumous) (1922-1992)	1992
30.	Gulzari Lal Nanda (Posthumous) (1898-1998)	1997

31.	Smt. Aruna Asaf Ali (Posthumous) (1909-1996)	1997
32.	Dr. A.P.J. Abdul Kalam (1931-2015)	1997
33.	Smt. Madurai Shanmukhavadivu Subbulakshmi (1916-2005)	1998
34.	Chidambaram Subramaniam (1910-2000)	1998
35.	Loknayak Jayaprakash Narayan (Posthumous) (1902-1979)	1999
36.	Professor Amartya Sen (b-1933)	1999
37.	Lokpriya Gopinath Bordoloi (Posthumous) (1890-1950)	1999
38.	Pandit Ravi Shankar (1920-2012)	1999
39.	Sushil Lata Dinanath Mangeshkar (b-1929)	2001
40.	Ustad Bismillah Khan (1916-2006)	2001
41.	Pandit Bhimsen Gururaj Joshi (b-1922-2011)	2009
42.	Prof. C.N.R. Rao (1934)	2014
43.	Sachin Ramesh Tendulkar (b-1973)	2014
44.	Pandit Madan Mohan Malaviya (Posthumous) (1861-1946)	2015
45.	Atal Behari Vajpayee (1924-2018)	2015
46.	Nanaji Deshmukh (Posthumus) (1916-2010)	2019
47.	Dr. Bhupen Hazarika (Posthumus) (1926-2011)	2019
48.	Pranab Mukherjee (1935-2020)	2019

PADMA AWARDS ANNOUNCED ON REPUBLIC DAY

Padma Awards

Padma Awards are among the highest civilian awards of the country. They are conferred in three categories, namely, 'Padma Vibhushan', 'Padma Bhushan' and 'Padma Shri'. The awards are given for distinguished service in various fields of activities including art, social work, public affairs, science and engineering, sports, medicine, literature and education. The awards are announced on the eve of Republic Day every year. In 2020, the President of India conferred 141 Padma Awards including 4 duo cases (In a duo case, the award is counted as one). It includes 7 Padma Vibhushan, 16 Padma Bhushan and 118 Padma Shri Awards. Of these 33 were women, 18 were from the category of foreigners/NRI/PIO/OCI, and 12 posthumous awardees.

Padma Vibhushan Recipients	: George Fernandes (Posthumous)
	: Arun Jaitley (Posthumous)
	: Sir Anerood Jugnauth GCSK (Foreigner)
	: M.C. Mary Kom
	: Chhannulal Mishra
	: Sushma Swaraj (Posthumous)
	: Vishveshateertha Swamiji Sri Pejavara Adhokhaja Matha
Padma Bhushan Recipients	: M. Mumtaz Ali (Sri M)
	: Syed Muazzem Ali (Posthumous) (Foreigner)
	: Muzaffar Hussain Baig
	: Ajoy Chakravorty
	: Manoj Das
	: Balkrishna Doshi
	: Krishnammal Jagannathan
	: S.C. Jamir
	: Anil Prakash Joshi
	: Dr. Tsering Landol
	: Anand Mahindra
	: Neelakanta Ramakrishna Madhava Menon (Posthumous)
	: Manohar Gopalkrishna Prabhu Parrikar
	: Jagdish Sheth (Foreigner)
	: P.V. Sindhu
	: Venu Srinivasan
Padma Shri Recipients	: Guru Shashadhar Acharya
	: Dr. Yogi Aeron
	: Jai Prakash Agarwal
	: Jagdish Lal Ahuja
	: Kazi Masum Akhtar
	: Gloria Arieira (Foreigner)

: Khan Zaheerkhan Bakhtiyarkhan
: Dr. Padmavathy Bandopadhyay
: Dr. Sushovan Banerjee
: Dr. Digambar Behera
: Dr. Damayanti Beshra
: Pawar Popatrao Bhaguji
: Himmata Ram Bhambhu
: Sanjiv Bikhchandani
: Gafurbhai M. Bilakhia
: Bob Blackman (Foreigner)
: Indira P. P. Bora
: Madan Singh Chauhan
: Usha Chaumar
: Lil Bahadur Chettri
: Lalitha & Saroja Chidambaram (Duo)
: Dr. Vajira Chitrasena (Foreigner)
: Dr. Purushottam Dadheech
: Utsav Charan Das
: Prof. Indra Dassanayake (Posthumous) (Foreigner)
: H. M. Desai
: Manohar Devadoss
: Oinam Bembem Devi
: Lia Diskin (Foreigner)
: M. P. Ganesh
: Dr. Bangalore Gangadhar
: Dr. Raman Gangakhedkar
: Barry Gardiner (Foreigner)
: Chewag Motup Goba
: Bharat Goenka
: Yadla Gopalarao
: Mitrabhanu Gountia
: Tulasi Gowda
: Sujoy K. Guha

: Harekala Hajabba
: Enamul Haque (Foreigner)
: Madhu Mansuri Hasmukh
: Abdul Jabbar (Posthumous)
: Bimal Kumar Jain
: Meenakshi Jain
: Nemnath Jain
: Shanti Jain
: Sudhir Jain
: Benichandra Jamatia
: K. V. Sampath Kumar & Vidushi
: Jayalakshmi K. S. (Duo)
: Karan Johar
: Leela Joshi
: Sarita Joshi
: C. Kamlova
: Dr. Ravi Kannan R.
: Ekta Kapoor
: Yazdi Naoshirwan Karanjia
: Narayan J. Joshi Karayal
: Dr. Narinder Nath Khanna
: Naveen Khanna
: S. P. Kothari (Foreigner)
: V. K. MunusamyKrishnapakthar
: M. K. Kunjol
: Manmohan Mahapatra (Posthumous)
: Ustad Anwar Khan Mangniyar
: Kattungal Subramaniam Manilal
: Munna Master
: Prof. Abhiraj Rajendra Mishra
: Binapani Mohanty
: Dr. Arunoday Mondal
: Dr. Prithwindra Mukherjee (Foreigner)
: Sathyanarayan Mundayoor

: Manilal Nag
: N. Chandrasekharan Nair
: Dr. Tetsu Nakamura (Posthumous)
(Foreigner)
: Shiv Dutt Nirmohi
: Pu Lalbiakthanga Pachuau
: Moozhikkal Pankajakshi
: Dr. Prasanta Kumar Pattanaik (Foreigner)
: Jogendra Nath Phukan
: Rahibai Soma Popere
: Yogesh Praveen
: Jitu Rai
: Tarundeep Rai
: S. Ramakrishnan
: Rani Rampal
: Kangana Ranaut
: Dalavai Chalapathi Rao
: Shahbuddin Rathod
: Kalyan Singh Rawat
: Chintala Venkat Reddy
: Dr. Shanti Roy
: Radhamohan & Sabarmatee (Duo)
: Batakrushna Sahoo
: Trinity Saioo
: Adnan Sami
: Vijay Sankeshwar
: Dr. Kushal Konwar Sarma
: Syed Mehboob Shah Qadri alias Sayedbhai
: Mohammed Sharif
: Shyam Sundar Sharma
: Dr. Gurdip Singh
: Ramjee Singh
: Vashishtha Narayan Singh (Posthumous)
: Daya Prakash Sinha

: Dr. Sandra Desa Souza
: Vijayasarathi Sribhashyam
: Kali Shabi Mahaboob & Sheik Mahaboob Subani
: Javed Ahmad Tak
: Pradeep Thalappil
: Yeshe Dorjee Thongchi
: Robert Thurman (Foreigner)
: Agus Indra Udayana (Foreigner)
: Harish Chandra Verma
: Sundaram Verma
: Dr. Romesh Tekchand Wadhwani (Foreigner)
: Suresh Wadkar
: Prem Watsa (Foreigner)

JEEVAN RAKSHA PADAK SERIES OF AWARDS

Jeevan Raksha Padak series of awards are given for the courage and promptitude displayed by an individual in the meritorious act of saving the life of another person from drowning, fire incidents, rescue operations in mines, natural calamities and other such eventualities. There are three categories of Jeevan Raksha Padak awards, namely, Sarvottam Jeevan Raksha Padak, Uttam Jeevan Raksha Padak and Jeevan Raksha Padak. The Jeevan Raksha Padak Series of Awards 2019 were conferred on 54 persons. It includes Sarvottam Jeevan Raksha Padak to seven, Uttam Jeevan Raksha Padak to eight and Jeevan Raksha Padak to 39 persons.

Sarvottam Jeevan Raksha Padak (7)

1. Master Firoos. E.P. (Posthumous), Kerala
2. Mahesh Pandurang Sable, Maharashtra
3. Spainlinos L.Gadew (Posthumous), Meghalaya
4. Lalrempuia (Posthumous), Mizoram
5. Manjeet Singh (Posthumous), Haryana
6. Packiya Raj M, Jammu and Kashmir

7. Jagbir Singh (Posthumous), Haryana

Uttam Jeevan Raksha Padak (8)

1. Meesala Anand, Andhra Pradesh
2. Jeevan Antony, Kerela
3. Saritha K., Kerala
4. Kamaldev N. M., Kerala
5. Master Shammas V.P., Kerala
6. C. Lianhawla, Mizoram
7. Shivcharan Singh, Rajasthan
8. Mukesh Kumar Meena, Rajasthan

Jeevan Raksha Padak (39)

1. Gundapu Rajesh, Andhra Pradesh
2. Dineshbhai Narsinh Bhai Vasava, Gujarat
3. Firozbhai Fatubhai Multani, Gujarat
4. Pranvirsinh Chandansinh Sarvaiya, Gujarat
5. Pruthvisinh Ranjitsinh Jadeja, Gujarat
6. Shravankumar Chandubhai Vasasva, Gujarat
7. Mohd. Younis Awan, Jammu and Kashmir
8. Zakir Hussain, Jammu and Kashmir
9. Maqsood Ahmed, Jammu and Kashmir
10. Shabir Ahmad Dar, Jammu and Kashmir
11. Master Anchal P.P., Kerala
12. Rahul Jat, Madhya Pradesh
13. Nadeem Khan, Madhya Pradesh
14. Sanjeev Dhakad, Madhya Pradesh
15. Rakesh Tiwari, Madhya Pradesh
16. Lokesh Gathe, Madhya Pradesh
17. Tahzib Kazi, Madhya Pradesh
18. Master Everbloom K. Nongrum, Meghalaya

19. Master Nihi Freddy War, Meghalaya
20. Lalawmpuia, Mizoram
21. R Sridhar, Tamil Nadu
22. Mamlesh Singh, Uttarakhand
23. Vinod Thapliyal, Uttarakhand
24. Kunwar Divyansh Singh, Uttar Pradesh
25. M. Samayamuthu, Andaman and Nicobar Islands
26. Mahesh Singh Gurjar, Rajasthan
27. Inderjeet Singh, Delhi
28. Pankaj Kala, Haryana
29. Reuben B. Malsawmtluanga, Himachal Pradesh
30. N. Karthikeyan, Maharashtra
31. Prashant Kumar, Uttar Pradesh
32. Mukesh Kumar, Andhra Pradesh
33. Ashutosh Sharma, Kerala
34. Master Siddappa Kempanna Hosatti, Karnataka
35. Master Shivanand Dasharath Hosatti, Karnataka
36. Kumari Pramod Balasaheb Devdhe, Maharashtra
37. Master Shivraj Ramchandra Bhandarwad, Maharashtra
38. Tengale Dattatray Suresh, Maharashtra
39. Vishal Panjabrao Potkatare, Chhattisgarh

Sardar Patel National Unity Award

The highest civilian award in the field of contribution to the unity and integrity of the country was instituted in 2019. The award in the name of Sardar Vallabhbhai Patel is to recognise the notable and inspiring contributions made by Indian citizens and organisations. The award shall consist of a medal and a citation. No monetary grant or cash award shall be attached to it. Not more than three awards shall be given in a year. It shall not be conferred posthumously except in very rare and highly deserving cases. Nominations will be invited publically every year. The application shall be filed online on the website of Ministry of Home

Affairs between 1st June to 31st July each year. Any Indian national or institution or organisation based in India can nominate an individual for consideration for this award. Individuals can also nominate themselves. The recommendations for the award may also be invited from the state governments/ UT administrations and ministries/departments of the Government of India who shall send their recommendations online.

NOBEL LAUREATES

ABHIJIT VINAYAK BANERJEE (b-1961): Mumbai-born economist Abhijit Vinayak Banerjee won the Nobel Prize in Economic Sciences in 2019. The 58-year-old half-Bengali, half-Konkani economist is the Ford Foundation International Professor of Economics at the Massachusetts Institute of Technology in Cambridge. He spent his early life in West Bengal, and studied in the University of Calcutta. Later, he received his post-graduation degree in Economics from New Delhi's Jawaharlal Nehru University in 1983. He went on to obtain a Ph.D. in Economics from the Harvard University in 1988. He shared the prestigious global award with his economist-wife, Esther Duflo, and another US-based economist, Michael Kremer, for their experimental approach to alleviating global poverty.

KAILASH SATYARTHI (b. 1954): The Nobel Peace Prize of 2014 was awarded to Kailash Satyarthi for struggle against the suppression of children and young people and for the right of all children to education. Satyarthi was born in Vidisha, Madhya Pradesh. He completed his degree in electrical engineering and a post-graduate degree in high voltage engineering. In 1980, he left his career as an electrical engineer to set up Bachpan Bachao Andolan (Save Childhood Movement). He also heads the Global March Against Child Labour, a movement to mobilise worldwide efforts to protect and promote the rights of all children.

VENKATRAMAN RAMAKRISHNAN (b. 1952): Venkatraman Ramakrishnan was awarded the Nobel Prize for Chemistry in 2009 for studies of the structure and function of the ribosome, molecular machine that makes protein. He was born in Chidambaram, Tamil Nadu. Dr. Ramakrishnan earned his B.Sc. in Physics (1971) from M. S. University in Baroda, Gujarat and Ph.D. (1976) in Physics from Ohio University in the USA. Making a transition from physics to biology, he studied a

molecule called Rhodopsin, as a graduate student in biology at the University of California, San Diego, from 1976 to 1978.

AMARTYA SEN (b-1933): Prof. Amartya Sen is the recipient of the Nobel Prize for Economics for the year 1998, becoming the first Asian to have been honoured with the award. The Santiniketan-born economist who is a pioneer in Welfare Economics has to his credit several books and papers on aspects of welfare and development. An economist with a difference, Prof. Sen is a humanist. He has distinguished himself with his outstanding writings on famine, poverty, democracy, gender and social issues. The 'impossibility theorem' suggested earlier by Kenneth Arrow states that it was not possible to aggregate individual choices into a satisfactory choice for society as a whole. Prof. Sen showed mathematically that societies could find ways to alleviate such a poor outcome.

SUBRAMANIAN CHANDRASHEKHAR (1910-1995) : The Nobel Prize for Physics in 1983 was awarded to Dr. S. Chandrashekhar, an Indian-born astrophysicist. Educated in Presidency College, Chennai, Dr. Chandrashekhar happened to be the nephew of his Nobel forbear, Sir C.V. Raman. He later migrated to the United States where he authored several books on Astrophysics and Stellar Dynamics. He developed a theory on white dwarf stars which posts a limit of mass of dwarf stars known also as Chandrashekhar Limit. His theory explains the final stages of stellar evolution.

MOTHER TERESA (1910-1997) : The Nobel Peace Prize was awarded to Mother Teresa in 1979. Of Albanian parentage, Agnes Gonxha Bojaxhiu was born on August 26,1910 in the town of Skopje, in the former Yogoslavia (now North Macedonia). She joined the Irish order of the Sisters of Loretto at Dublin in 1928 and came to Kolkata in 1929 as a missionary, only to find the misery of the abandoned and the destitute. Concern for the poor and the sick prompted her to found a new congregation, Missionaries of Charity. Having become an Indian citizen, Mother Teresa served the cause of dying destitutes, lepers and drug addicts, through *Nirmal Hriday* (meaning Pure Heart), the main centre of her activity. Her selfless service and unique devotion, not only to helpless fellow-Indians but also to the cause of world peace, earned her and India the first Nobel Peace Prize.

HARGOBIND KHORANA (b. 1922-2011): Hargobind Khorana was awarded the Nobel Prize for Medicine in 1968. Of Indian origin, Dr Khorana was born in Raipur, Punjab (now in Pakistan). He took his doctoral degree in Chemistry from Liverpool University and joined the University of Wisconsin as a Faculty Member in 1960. His major breakthrough in the field of Medicine - interpreting the genetic code and analysing its function in protein synthesis - fetched him the Nobel Prize.

CHANDRASEKHARA VENKATA RAMAN (1888-1970) : India's first Nobel Prize for Physics was claimed in 1930 by the renowned physicist Sir C.V. Raman. Born at Thiruvanaikkaval near Tiruchirapalli in Tamilnadu, Raman studied at Presidency College, Chennai. Later, he served as Professor of Physics at Calcutta University. Recipient of many honours and awards, including the title of 'sir', Sir C.V. Raman received the Nobel Prize for an important optics research, in which he discovered that diffused light contained rays of other wavelengths—what is now popularly known as the Raman Effect. His theory discovered in 1928 explains the change in the frequency of light passing through a transparent medium.

RABINDRANATH TAGORE (1861-1941): Rabindranath Tagore was the first Indian ever to receive a Nobel Prize. Popularly known as *Gurudev,* India's Poet Laureate Tagore was born on May 7, 1861, in Kolkata. He was awarded the Nobel Prize for Literature in recognition of his work *Geetanjali,* a collection of poems, in 1913. Tagore wrote many love lyrics: *Geetanjali* and *Sadhana are* among his important works. The poet, dramatist and novelist is also the author of India's National Anthem. In 1901, he founded the famous Santiniketan which later came to be known as Visva-Bharati University.

COMMANDERS-IN-CHIEF

Name	Tenure
General Sir Rob Lockhart	August 15, 1947-December 31, 1947
General Sir Roy Bucher	January 01, 1948-January 14, 1949
General (Late Field Marshal) K.M. Cariappa	January 15, 1949-January 14, 1953

CHIEF OF DEFENCE STAFF

To bring in reform in higher defence management in the country, the post of Chief of Defence Staff (CDS) was created in the rank of a four-star General with salary and prerequisites equivalent to a Service Chief. The Chief of Defence Staff will also head the Department of Military Affairs (DMA), to be created within the Ministry of Defence and function as its Secretary.

Gen. Bipin Rawat has taken over as the first CDS of the country from January 1, 2020 for a three-year tenure.

CHIEFS OF ARMY STAFF

Name	Tenure
General Maharaj Rajendra Sinhji	April 01, 1955-May 14, 1955
General S.M. Srinagesh	May 15, 1955-May 07, 1957
General K.S. Thimayya	May 08, 1957-May07, 1961
General P.N. Thapar	May 08, 1961 -November 19, 1962
General J.N. Choudhuri	November 20, 1962-June 07, 1966
General P.P. Kumaramangalam	June 08, 1966-June 07, 1969
Field Marshal S.H.F.J. Manekshaw	08 June 1969-15 January 1973
General G.G. Bewoor	January 16, 1973-May 31, 1975
General T.N. Raina.	June 01, 1975-May 31, 1978
General O.P. Malhotra.	June 01, 1978-May 31, 1981
General K.V. Krishna Rao.	June 01, 1981-July 31, 1983
General A.S. Vaidya	August 01, 1983-January 31, 1985
General K. Sundarji	February 01, 1985-May 31, 1988
General V.N. Sharma.	June 01, 1988-June 30, 1990
General S.F. Rodrigues.	July 01, 1990-June 30, 1993
General B.C. Joshi	July 01, 1993-November 19, 1994
General S. Roychowdhury	November 20, 1994-September 30, 1997
General VP. Malik	October 01, 1997-September 30, 2000

General S. Padmanabhan.	October 01, 2000-December 30, 2002
General N.C. Vij	December 31, 2002-January 31, 2005
General J.J. Singh.	February 01, 2005 -September 30, 2007
General Deepak Kapoor	September 30, 2007-March 30, 2010
General V.K. Singh.	March 31,2010-May 31, 2012
General Bikram Singh	June 01, 2012-July 31, 2014
General Dalbir Singh.	August 01, 2014-December 31, 2016
General Bipin Rawat	January 01, 2017-December 31, 2019
General Manoj Mukund Naravane	December 31, 2019-till date

Source : indianarmy.nic.in

CHIEFS OF NAVAL STAFF

Name	Tenure
Rear Admiral J.T.S. Hall	August 15, 1947-August 14, 1948
Admiral Sir Edward Parry	August 14, 1948-October 13, 1951
Admiral Sir Mark Pizey	October 13, 1951 -July 21, 1955
Vice Admiral Sir Stephen Carlill	July 21, 1955-April 21, 1958
Vice Admiral R.D. Katari	April 22, 1958-June 04, 1962
Vice Admiral B.S. Soman	June 04, 1962-March 03, 1966
Admiral A.K. Chatterjee	March 03, 1966-February 27, 1970
Admiral S.M. Nanda	February 28, 1970-February 28, 1973
Admiral S.N. Kohli	February 28, 1973-February 28, 1976
Admiral J.L. Cursetji	February 29, 1976-February 28, 1979
Admiral R.L. Pereira	February 28, 1979-February 28, 1982
Admiral O.S. Dawson	February 28, 1982-November 30, 1984
Admiral R.H. Tahiliani	November 30, 1984-November 30, 1987
Admiral J.G. Nadkarni	November 30, 1987-November 30, 1990
Admiral L. Ramdas	November 30, 1990-September 30, 1993
Admiral VS. Shekhawat	September 30, 1993-September 30, 1996
Admiral Vishnu Bhagwat	September 30, 1996-December 30, 1998
Admiral Sushil Kumar..	December 30, 1998 -December 29, 2001
Admiral Madhvendra Singh	December 29, 2001 -July 31, 2004
Admiral Arun Prakash	July 31, 2004 -October 30, 2006
Admiral Sureesh Mehta	October 31, 2006 -August 31, 2009

Admiral Nirmal Verma	August 31, 2009 -August 31, 2012
Admiral DK Joshi	August 31, 2012- April 16, 2014
Admiral Robin K Dhowan	April 17, 2014 -May 31, 2016
Admiral Sunil Lanba	June 01, 2016-May 31, 2019
Admiral Karambir Singh	May 31, 2019 - till date

Source: indiagovin

CHIEFS OF AIR STAFF

Name	Tenure
Air Marshal Sir Thomas W Elmhirst	August 15, 1947-February 21,1950
Air Marshal Sir Ronald I Chapman	February 22, 1950-December 09, 1951
Air Marshal Sir Gerald E Gibbs	December 10, 1951-March 31, 1954
Air Marshal S Mukherjee	April 01, 1954-November 08, 1960
Air Marshal AM Engineer	December 01, 1960-July 31, 1964
Air Chief Marshal Arjan Singh	August 01, 1964- July 15, 1969
Air Chief Marshal PC Lal	July 16, 1969-January 15, 1973
Air Chief Marshal OP Mehra	January 16, 1973-January 31, 1976
Air Chief Marshal H Moolgavkar	February 01, 1976-August 31, 1978
Air Chief Marshal IH Latif	September 01, 1978-August 31, 1981
Air Chief Marshal Dilbagh Singh	September 01, 1981 -September 03, 1984
Air Chief Marshal LM Katre	September 04, 1984-July 01, 1985
Air Chief Marshal DA La Fontaine	July 03, 1985-July 31, 1988
Air Chief Marshal SK Mehra	August 01, 1988-July 31, 1991
Air Chief Marshal NC Suri	July 31, 1991-July 31, 1993
Air Chief Marshal SK Kaul	August 01, 1993- December 31, 1995
Air Chief Marshal SK Sareen	December 31, 1995-December 31, 1998
Air Chief Marshal AY Tipnis	December 31, 1998-December 31, 2001
Air Chief Marshal S Krishnaswamy	December 31, 2001-December 31, 2004
Air Chief Marshal S P Tyagi	December 31, 2004-March 31, 2007

Air Chief Marshal F H Major	March 31, 2007-May 31, 2009
Air Chief Marshal P V Naik	May 31,2009-July 31,2011
Air Chief Marshal NAK Browne	July 31, 2011-December 31, 2013
Air Chief Marshal Aroop Raha	January 01, 2014-December 31, 2016
Air Chief Marshal B S Dhanoa	January 01, 2017-September 30, 2019
Air Chief Marshal R K Singh Bhadauria	September 30, 2019-till date

Source : indianairforce.nic.in

WINNERS OF PARAM VIR CHAKRA

Major Som Nath Sharma, Kumaon Regiment
Posthumous-November 1947 (Kashmir Operations 1947-48)
2nd Lt. R.R. Rane, Corps of Engineers
April 1948 (Kashmir Operations 1947-48)
Company Havaldar Major Piru Singh, Rajputana Rifles
Posthumous-July 1948 (Kashmir Operations 1947-48)
L/NK Karam Singh, Sikh Regiment
October 1948 (Kashmir Operations 1947-48)
Naik Jadunath Singh, Rajput Regiment
Posthumous-February 1948 (Kashmir Operations 1947-48)
Captain Gurbachan Singh Salaria, Gorkha Rifles
Posthumous-December 1961 (Congo)
Major Dhan Singh Thapa, Gorkha Rifles
October 1962 (Ladakh)
Subedar Joginder Singh, Sikh Regiment
Posthumous-October 1962 (NEFA)
Major Shaitan Singh, Kumaon Regiment
Posthumous-November 1962 (Ladakh)
CQMH Abdul Hamid, Grenadiers
Posthumous-September 1965 (Operation against Pakistan)
Lt. Col. A.B. Tarapore, Poona Horse

Posthumous-October 1965 (Operation against Pakistan)
Flg. Officer Nirmal Jit Singh Sekhon, Flg. Pilot
Posthumous-December 1971 (Indo-Pakistan conflict)
Major Hoshiar Singh, Grenadiers
December 1971 (Indo-Pakistan conflict)
2nd Lt. Arun Khetarpal, 17 Poona Horse
Posthumous-December 1971 (Indo-Pakistan conflict)
L/NK Albert Ekka, Brigade of Guards
Posthumous-December 1971 (Indo-Pakistan conflict)
Naib Subedar Bana Singh, J & K Light Infantry
June 1987 (Operations in Siachen Glacier)
Major Ramaswamy Parameswaran, Mahar Regiment,
Posthumous-November 1987 (IPKF Operations in Sri Lanka)
Capt Vikram Batra, 13 J&K Rifles
Posthumous-June 1999 (OP Vijay in Kargil)
Lt Manoj Kumar Pandey, 11th Gorkha Rifles
Posthumous-July 1999 (OP Vijay in Kargil)
Rifleman Sanjay Kumar, 13 J&K Rifles
July1999 (OP Vijay in Kargil)
Gdr Yogender Singh Yadav, 18 Grenadiers
July 1999 (OP Vijay in Kargil)

SAHITYAAKADEMI AWARDS 2019

Language	Title and Genre	Author
Assamese	Chanakya (Novel)	Joysree Goswami Mahanta
Bengali	Ghumer Darja Thele (Essays)	Chinmoy Guha
Bodo	Akhai Athumniphrai (Poetry)	Phukan Ch. Basumatary
Dogri	Bandralta Darpan (Essays)	Om Sharma Jandriari
English	An Era of Darkness (Non-Fiction)	Shashi Tharoor
Gujarati	Mojma Revu Re (Essays)	Ratilal Borisagar
Hindi	Chheelate Hue Apne Ko (Poetry)	Nand Kishore Acharya

Kannada	Kudi Esaru (Autobiography)	Vijaya
Kashmiri	Akh Yaad Akh Qayamat (Short Stories)	Abdul Ahad Hajini
Konkani	The Words (Poetry)	Nilba A. Khandekar
Maithili	Jingik Oriaon Karait (Poetry)	Kumar Manish Arvind
Malayalam	Achan Piranna Veedu (Poetry)	V. Madhusoodanan Nair
Manipuri	EiAmadi Adungeigi Eethat (Novel)	L. Birmangol Singh (Beryl Thanga)
Marathi	Kadachit Ajoonahi (Poetry)	Anuradha Patil
Odia	Bhaswati (Short Stories)	Tarun Kanti Mishra
Punjabi	Antheen (Short Stories)	Kirpal Kazak
Rajasthani	Bareek Baat (Short Stories)	Ramsawroop Kisan
Sanskrit	Prajnachakshusham (Poetry)	Penna Madhusudan
Santali	Sisirjali (Short Stories)	Kali Charan Hembram
Sindhi	Jeejal (Short Stories)	Ishwar Moorjani
Tamil	Sool (Novel)	Cho. Dharman
Telugu	Septabhoomi (Novel)	Bandi Narayana Swamy
Urdu	Sawaneh-E-Sir Syed: Ek Bazdeed (Biography)	Shafey Kidwai
Nepali	(To be declared later)	

National Sports and Adventure Awards

The Rajiv Gandhi Khel Ratna, officially known as Rajiv Gandhi Khel Ratna Award in Sports and Games, is the highest sporting honour of the country. It is awarded annually by the Ministry of Youth Affairs and Sports. The recipient(s) is/are selected and honoured for their "spectacular and most outstanding performance in the field of sports over a period of four years" at international level.

The Dronacharya Award for Outstanding Coaches in Sports and Games, is sports coaching honour of the country. It is awarded annually to selected people for "outstanding and meritorious work on a consistent basis and enabled sportspersons to excel in international events" over a period of four years.

The Arjuna Awards are given to recognise outstanding achievement in sports.

The Dhyan Chand Award is the lifetime achievement sporting honour of the country.

The Rashtriya Khel Protsahan Puruskar is conferred in four categories: (a) identification and nurturing of budding/young talent; (b) encouragement to sports through corporate social responsibility; (c) employment of sports persons and sports welfare measures; and (d) sports for development.

The Tenzing Norgay National Adventure Award is the highest recognition for outstanding achievements in the field of adventure on land, sea and air. It is at par with the Arjuna Award for sporting excellence.

Maulana Abul Kalam Azad Trophy is a running trophy by the Ministry of Education and awarded each year to a university which has all-round best performance in sports at inter-university, national and international competitions.

Rajiv Gandhi Khel Ratna Award 2020

Rohit Sharma (cricket); Mariyappan T. (para athletics); Manika Batra (table tennis); Vinesh (wrestling); Rani (hockey).

Dronacharya Award 2020

(Regular Category) Jude Felix Sebastian (hockey); Yogesh Malviya (mallakhamb); Jaspal Rana (shooting); Kuldeep Kumar Handoo (wushu); Gaurav Khanna (para badminton).

(Life-time category) Dharmendra Tiwary (archery); Purushotham Rai (athletics); Shiv Singh (boxing); Romesh Pathania (hockey); Krishan Kumar Hooda (kabaddi); Vijay Bhalchandra Munishwar (para powerlifting); Naresh Kumar (Tennis); Om Parkash Dahiya (wrestling)

Arjuna Award 2020

Atanu Das (archery); Dutee Chand (athletics); Satwik Sairaj Rankireddy (badminton); Chirag Chandrasekhar Shetty (badminton); Vishesh Bhriguvanshi (basketball); Subedar Manish Kaushik (boxing); Lovlina Borgohain (boxing); Ishant Sharma (cricket); Deepti Sharma (cricket); Sawant Ajay Anant (equestrian); Sandesh Jhingan (football); Aditi Ashok (golf); Akashdeep Singh (hockey); Deepika (hockey); Deepak (kabaddi); Kale Sarika Sudhakar (kho kho); Dattu Baban Bhokanal (rowing); Manu Bhaker (shooting); Saurabh Chaudhary

(shooting); Madhurika Suhas Patkar (table tennis); Divij Sharan (tennis); Shiva Keshavan (winter sports); Divya Kakran (wrestling); Rahul Aware (wrestling); Suyash Narayan Jadhav (para swimming); Sandeep (para athletics); Manish Narwal (para shooting).

Dhyan Chand Award 2020

Kuldip Singh Bhullar (athletics); Jincy Philips (athletics); Pradeep Shrikrishna Gandhe (badminton); Trupti Murgunde (badminton); N. Usha (boxing); Lakha Singh (boxing); Sukhvinder Singh Sandhu (football); Ajit Singh (hockey); Manpreet Singh (kabaddi); J. Ranjith Kumar (para athletics); Satyaprakash Tiwari (para badminton); Manjeet Singh (rowing); Late Sachin Nag (swimming); Nandan P. Bal (tennis); Netarpal Hooda (wrestling).

Rashtriya Khel Protsahan Puruskar 2020

(Identification and Nurturing of Budding and Young Talent) (1) Lakshya Institute (2) Army Sports Institute; (Encouragement to sports through Corporate Social Responsibility) Oil and Natural Gas Corporation (ONGC) Ltd.; (Employment of sportspersons and sports welfare measures) Air Force Sports Control Board, Sports for Development International Institute of Sports Management (IISM)

Tenzing Norgay National Adventure Awards 2019

(Land Adventure) Anita Devi, Col. Sarfraz Singh, Taka Tamut, Narender Singh, Keval Hiren Kakka; (Water Adventure) Satendra Singh; (Air Adventure) Gajanand Yadava; (Lifetime Achievement) Late Magan Bissa.

Punjab University, Chandigarh was conferred **Maulana Abul Kalam Azad (MAKA) Trophy 2019-20.**

LIST OF STATE-WISE NATIONAL HIGHWAYS IN THE COUNTRY

SI. No.	Name of State	National Highway No.	Total Length (in km)
1.	Andhra Pradesh	16, 216, 216A, 516C, 516D, 516 E, 716, 716A, 716B, 26, 326, 326A, 30, 40, 140, 340, 340C, 42, 44 N.S., 544D, 544F, 544DD, 544E, 150A, 65, 165,	6,912

		365BB, 565, 765, 67, 167, 167A, 167B, 167BC, 69, 71, 75	
2.	Arunachal Pradesh	13, 113, 313, 513, 713, 713A, 15, 115, 215, 315, 415, 515, 315A	2,537
3.	Assam	2, 702, 702C, 702D, 6, 306, 8, 208A, 15, 115, 215, 315, 315A, 415, 515, 715, 715A, 17, 117, 117A, 217, 27 E.W., 127, 127A, 127B, 127C, 127D, 127E, 427, 627, 29, 129, 329, 329A, 37	3,909
4.	Bihar	19 G.Q., 119, 219, 319, 319A, 20, 120, 22, 122, 122A, 122B, 322, 722, 922, 27 E.W., 227, 227A, 227F, 227J, 227L, 327, 327A, 327AD, 527, 527A, 527B, 527C, 527D, 527E, 727, 727A, 727AA, 31, 131, 131 A, 131 B, 231, 331, 431, 531, 33, 133, 133A, 133B, 333, 333A, 333B, 333C, 139	5,358
5.	Chandigarh	5	15
6.	Chhattisgarh	30, 130, 130A, 130B, 130C, 130D, 130CD, 930, 43, 143B, 343, 45, 49, 149B, 53, 153, 353, 63, 163, 163A	3,605
7.	Delhi	9, 709B, 44, 344M, 344N, 344P, 48, 148A, 148AE, 148NA, 248BB	157
8.	Goa	748, 748AA, 66, 366, 566	293
9.	Gujarat	NE-1, 27, 927D, 41, 141, 341, 47, 147, 147D, 48, 148M, 148N, 848, 848A, 848B, 51, 151, 151 A, 251, 351, 351 F, 751, 751 D, 751 DD, 53, 753B, 953, 754K, 56, 756, 58, 64, 68, 168, 168A	6,635
10.	Haryana	NE2, 703, 5, 105, 7, 907, 907G, 9, 709, 709A, 709AD, 11, 919, 334B, 334D, 44, 344, 344N, 344P, 444A, 48, 148A, 148B, 148N, 148NA, 248A, 248BB, 54, 52, 152, 152A, 152D, 352, 352A, 352R, 352W, 254	3,166
11.	Himachal Pradesh	3, 103, 303, 503, 503A, 5, 105, 205, 305, 505, 505A, 705, 7, 707, 907A, 907, 154, 154A, 44 N.S.	2,607
12.	Jammu & Kashmir	1, 301, 501, 701, 701 A, 3, 44, 144, 144A, 244, 244A, 444	2,423
13.	Jharkhand	114A, 18, 118, 218, 19, 419, 20, 220, 320, 320D, 320G, 22, 522, 33, 133, 333, 133A, 133B, 333A,	3,367

		39, 139, 43, 143, 143A, 143B, 143AG, 143D, 143H, 343, 49	
14.	Karnataka	44 N.S., 544DD, 544E, 48 G.Q., 548B, 548H, 648, 748, 748AA, 948, 948A, 50, 150, 150A, 52, 752K, 160, 161 A, 561 A, 163, 65, 66, 166E, 766, 766C, 766E, 766EE, 67, 167, 367, 367A, 69, 169, 169A, 369, 369E, 73, 173, 373, 75, 275, 275K, 181	7,335
15.	Kerala	544, 744, 66, 766, 966, 966 A, 966 B, 183, 183A, 85, 185	1,782
16.	Madhya Pradesh	719, 27, 927A, 30, 34, 135, 135B, 135BB, 135BD, 135BG, 135C, 44, 45, 934, 39, 339B, 539, 43, 543, 943, 46, 146, 146B, 346, 47, 147E, 347, 347A, 347B, 347C, 547, 548C, 52, 552 Ext., 752B, 752C, 752G, 753L, 56, 161G	8,772
17.	Maharashtra	930, 930D, 130D, 543, 44, 47, 547, 547E, 347C, 247, 647, 347A, 48, 348, 348A, 348B, 348BB, 548A, 548B, 548C, 548DD, 548H, 548D, 548, 548CC, 548E, 848, 848A, 50, 150, 52, 652, 752E, 752G, 752I, 752K, 752H, 53, 353C, 353D, 353E, 753, 753A, 753B, 753E, 753F, 953, 353B, 353I, 753J, 753L, 353J, 353K, 753C, 753BB, 753AB, 753H, 753M, 60, 160, 160A, 160B, 160C, 160D, 160H, 61 161, 161A, 161E, 161G, 161H, 461 B, 361 F, 361, 361 B, 361C, 361H, 561A , 561, 761, 63, 65, 465, 965, 965DD, 965D, 965C, 965G, 66, 166, 166A,166H, 166D, 166F, 166G, 166E, 266	17,757
18.	Manipur	2, 102, 102A, 102B, 102C, 202, 702A, 29, 129A, 37, 137, 137A	1,750
19.	Meghalaya	6, 106, 206, 217, 127B	1,156
20.	Mizoram	2, 102B, 302, 502, 502A, 6, 306, 306A, 108	1,423
21.	Nagaland	2, 202, 702, 702A, 702B, 702D, 29, 129, 129A, 229, 329A	1,548
22.	Odisha	16 C.Q., 316, 316A, 516, 516A, 18, 20, 220, 320D, 520, 720, 26, 126, 126A, 326, 326A, 130C, 130CD, 143, 143H, 49, 149, 53, 153B, 353, 55, 655, 57, 157, 157A, 59, 63	5,762

23.	Puducherry	32, 332	27
24.	Punjab	3, 503, 503A, 703, 703A, 703B, 5, 105B, 205, 205A, 7, 9, 44, 344, 344A, 344B, 148B, 148BB, 52, 152, 152A, 154, 154A, 254, 354, 354B, 354E, 754, 62	3,274
25.	Rajasthan	709, 11, 311, 911, 911A, 919, 21, 921, 23, 123, 25, 125, 325, 925, 925A, 27, 927A, 44, 48, 148, 148B, 148C, 148D, 148N, 248, 248A, 448, 52, 552, 552C, 752, 54, 754K, 954, 56, 156, 58, 158, 458, 758, 62, 162, 162A, 68, 168, 168A, 968, 70	10,342
26.	Sikkim	10, 310, 31 OA, 510, 710, 717A, 717B	463
27.	Tamil Nadu	16 C.Q., 716, 716A, 716B, 32, 32 Ext., 132, 132B, 332, 332A, 532, 36, 136, 136B, 336, 536, 38, 138, 338, 40, 42, 44 N.S., 544, 544H, 744, 744A, 844, 944, 48 G.Q., 648, 948, 66, 75, 77, 79, 179A, 179B, 179D, 81, 181, 381, 381 A, 381 B, 83, 183, 383, 85, 785, 87	6,742
28.	Telangana	30, 44, 150, 353B, 353C, 61, 161, 161 B, 161AA, 161BB, 63, 163, 363, 563, 65, 365, 365A, 365B, 365BB, 565, 765, 765D, 167	3,795
29.	Tripura	8, 108, 108A, 108 B, 208, 208A	854
30.	Uttar Pradesh	NE2, 307, 9, 509, 709A, 709AD, 709B, 19, 219, 319D, 519, 719, 21, 321, 321G, 123, 24, 124C, 124D, 27, 227A, 727, 727A, 727AA, 727BB, 727B, 727G, 727H, 927, 28, 128, 128A, 128B, 128C, 328, 328A, 30, 230, 330, 330A, 330B, 330D, 530, 730C, 730S, 530B, 730B, 730H, 730, 730A, 31, 731, 731 A, 731 B, 731AG, 731K, 135, 335, 931, 931A, 34, 234, 334, 334A, 334C, 334B, 334D, 334DD, 534, 734, 35, 135C, 135A, 135BB, 135B, 39, 339, 539, 44, 344, 552 Ext.	11,737
31.	Uttarakhand	7, 107, 107A, 507, 307, 707, 707A, 9, 109, 309, 309A, 309B, 30, 34, 134, 334, 334A, 534, 734, 344	2,949
32.	West Bengal	10, 110, 12, 112, 312, 512, 14, 114, 114A, 314, 16, 116, 116A, 116B, 316A, 17, 317, 317A, 517, 717,	3,664

		717A, 18, 218, 19, 419, 27, 327, 327B, 327C, 31, 131 A, 33, 133A, 49	
33.	A & N Islands	4	331
34.	Dadra & Nagar Haveli	848A	31
35.	Daman & Diu	848B, 251	22
	Total	1,32,500	

Sources: Ministry of Road Transport & Highways http://morth.nic.in

AMENDMENTS TO THE CONSTITUTION

1. The Constitution (First Amendment) Act, 1950—This amendment provided for several new grounds of restrictions on the right to freedom of speech and expression and the right to practise any profession or to carry on any trade or business as contained in Article 19 of the Constitution. The Ninth Schedule along with Articles 31A and 31B were inserted in the Constitution to protect laws, such as the land reform and other laws, from being challenged in the courts on the ground of violation of fundamental rights. The amendment also made changes in articles 5, 85, 87, 174, 176, 341, 342, 372 and 376.

2. The Constitution (Second Amendment) Act, 1952—By this amendment, the scale or representation for election to the Lok Sabha was readjusted.

3. The Constitution (Third Amendment) Act, 1954—This amendment substituted entry 33 of List III (Concurrent List) of the Seventh Schedule to make it correspond to Article 369.

4. The Constitution (Fourth Amendment) Act, 1955—Article 31 (2) of the Constitution was amended to re-state more precisely the state's power of compulsory acquisition and requisitioning of private property and distinguish it from cases where the operation of regulatory or prohibitory laws of the States results in "deprivation of property". Article 31A of the Constitution was also amended to extend its scope to cover categories of essential welfare legislation like abolition of zamindaris, proper planning of urban and rural areas and for effecting a full control over the mineral

and oil resources of the country, etc. Six Acts were included in the Ninth Schedule. Article 305 was also amended to save certain laws providing of State Monopolies.

5. The Constitution (Fifth Amendment) Act, 1955—This amendment made a change in Article 3 so as to empower President to specify a time limit for state legislatures to convey their views on the proposed central laws affecting areas, boundaries of their states.

6. The Constitution (Sixth Amendment) Act, 1956—This amendment made some changes in Articles 269 and 286 relating to taxes on sale and purchase of goods in the course of inter-state trade and commerce. A new entry 92A was added to the Union List of the Seventh Schedule to the Constitution.

7. The Constitution (Seventh Amendment) Act, 1956—This amendment purported to give effect to the recommendations of the State Reorganisation Commission and the necessary consequential changes. Broadly, the then existing states and territories were changed to have two-fold classification of states and union territories. The amendment also provided for composition of the House of the People, re-adjustment after every census, provisions regarding the establishment of new High Courts, High Court Judges etc.

8. The Constitution (Eighth Amendment) Act, 1960—Article 334 was amended with a view to extending the period of reservation of seats for Scheduled Castes and Scheduled Tribes and to the Anglo-Indian community by nomination in Parliament and in the State Legislatures for a further period of ten years to the year 1970.

9. The Constitution (Ninth Amendment) Act, 1960—The purpose of this amendment was to give effect to the transfer of certain territories to Pakistan in pursuance of the agreement entered into between Governments of India and Pakistan. This amendment was necessitated in view of the Judgement of Supreme Court in In Re: Berubari Union by which it was held that any agreement to cede a territory to another country could not be implemented by a law made under Article 3 but would only be implemented by an amendment of the Constitution.

10. The Constitution (Tenth Amendment) Act, 1961—This Act amended Article 240 and the First Schedule in order to include areas of Dadra and

Nagar Haveli as a Union Territory and to enable the President to "make regulations for the peace, progress and good government of the territory".

11. The Constitution (Eleventh Amendment) Act, 1961—The purpose of this amendment was to amend Articles 66 and 71 of the Constitution to provide that the election of President or Vice President could not be challenged on the ground of any vacancy in the appropriate electoral college.

12. The Constitution (Twelfth Amendment) Act, 1962—This amendment sought to include Goa, Daman and Diu as a Union Territory and to amend Article 240 for the purpose.

13. The Constitution (Thirteenth Amendment) Act, 1962—By this amendment, a new Article 371A was added to make special provisions with respect to state of Nagaland in pursuance of an agreement between Government of India and Naga People's Convention.

14. The Constitution (Fourteenth Amendment) Act, 1962—By this Act, Pondicherry was included in the First Schedule as a Union Territory, and this Act also enabled the creation of Legislature by Parliamentary law for Himachal Pradesh, Manipur, Tripura, Goa, Daman and Diu and Pondicherry.

15. The Constitution (Fifteenth Amendment) Act, 1963—This amendment provided for increase in the age of retirement of High Court Judges and for the provision of compensatory allowance to judges who are transferred from one High Court to another. The Act also provided for appointment of retired judges to act as judges of High Court. The ambit of Article 226 was widened so that when any relief is sought against any Government, authority or person for any action taken, the High Court within whose jurisdiction the cause of action arise may also have jurisdiction to issue appropriate directions, orders or writs. The Act also provided for the exercise of powers of Chairman of the Service Commissions, in their absence, by one of their members.

16. The Constitution (Sixteenth Amendment) Act, 1963—Article 19 was amended by this Act to impose further restriction on the rights to freedom of speech and expression, to assemble peaceably and without arms and to form associations in the interests of sovereignty and integrity of India. The oath of affirmation to be subscribed by candidates seeking election to Parliament and State Legislatures was amended to include

that they will uphold “the sovereignty and integrity of India”. The amendments are intended to promote national integration.

17. The Constitution (Seventeenth Amendment) Act, 1964—Article 31A was amended by this Act to prohibit the acquisition of land under personal cultivation unless the market value of the land is paid as compensation and the definition of “estate” was amended to include lands for which provisions are normally made in land reform enactments. The Ninth Schedule had also been amended to include 44 more acts.

18. The Constitution (Eighteenth Amendment) Act, 1966—Article 3 was amended by this Act to specify that the expression “State” will include a union territory also and to make it clear that the power to form a new state under this article includes a power to form a new state or union territory by uniting a part of a state or a union territory to another state or union territory.

19. The Constitution (Nineteenth Amendment) Act, 1966—Article 324 was amended to effect a consequential change as a result of the decision to abolish Election Tribunals and to hear election petitions by High Courts.

20. The Constitution (Twentieth Amendment) Act, 1966—This amendment was necessitated by the decision of the Supreme Courts in Chandramohan vs. State of Uttar Pradesh in which certain appointments of District Judges in the state of Uttar Pradesh were declared void by Supreme Court. A new Article 233A was added and the appointments made by Governor were validated.

21. The Constitution (Twenty-first Amendment) Act, 1967—By this amendment, Sindhi Language was included in the Eighth Schedule.

22. The Constitution (Twenty-second Amendment) Act, 1969—This act was enacted to facilitate the formation of a new autonomous state of Meghalaya within the state of Assam.

23. The Constitution (Twenty-third Amendment) Act, 1969—Article 334 was amended so as to extend the safeguards in respect of reservation of seats in Parliament and State Legislatures for Scheduled Castes and Scheduled Tribes as well as for Anglo-Indians for a further period of ten years to the year 1980.

24. The Constitution (Twenty-fourth Amendment) Act, 1971—This amendment was passed in the context of a situation that emerged with the verdict in Golaknath's case by Supreme Court. Accordingly, this Act amended Article 13 and Article 368 to remove all doubts regarding the power of Parliament to amend the Constitution including the Fundamental Rights.

25. The Constitution (Twenty-fifth Amendment) Act, 1971—This Act amended Article 31 in the wake of the bank nationalisation case. The word 'amount' was substituted in place of 'compensation' in the light of the judicial interpretation of the word 'compensation' meaning 'adequate compensation'.

26. The Constitution (Twenty-sixth Amendment) Act, 1971—By this amendment, the privy and privileges of the former rulers of Indian states were abolished. This amendment was passed as a result of Supreme Court decision in Madhav Rao's case.

27. The Constitution (Twenty-seventh Amendment) Act, 1971—This amendment was passed to provide for certain matters necessitated by the reorganisation of north-eastern states. A new Article 239B was inserted which enabled the promulgation of Ordinances by Administrators of certain union territories.

28. The Constitution (Twenty-eighth Amendment) Act, 1972—The amendment was enacted to abolish the special privileges of the members of Indian Civil Services in matters of leave, pension and rights as regard to disciplinary matters.

29. The Constitution (Twenty-ninth Amendment) Act, 1972—The Ninth Schedule to the Constitution was amended to include two Kerala Acts on land reforms.

30. The Constitution (Thirtieth Amendment) Act, 1972—The purpose of the amendment was to amend Article 133 in order to do away with the valuation test and curtail the number of appeals which are filed in the Supreme Court merely on the valuation test being satisfied, without any merit in them.

31. The Constitution (Thirty-first Amendment) Act, 1973—This Act, inter alia, raised the upper limit for the representation of states in the Lok Sabha from 500 to 525 and reduced the upper limit for the representation of union territories from 25 members to 20.

32. The Constitution (Thirty-second Amendment) Act, 1973—This Act provided the necessary constitutional authority for giving effect to the provision of equal opportunities to different areas of the state of Andhra Pradesh and for the constitution of an Administrative Tribunal with jurisdiction to deal with grievances relating to public services. It also empowered Parliament to legislate for the establishment of a Central University in the state.

33. The Constitution (Thirty-third Amendment) Act, 1974—By this amendment, Articles 101 and 190 were amended in order to streamline the procedure for resignation of Members of Parliament and State Legislatures.

34. The Constitution (Thirty-fourth Amendment) Act, 1974—By this Act, twenty more land tenure and land reforms laws enacted by various State Legislatures were included in the Ninth Schedule.

35. The Constitution (Thirty-fifth Amendment) Act, 1974—By this Act, a new Article 2A was added thereby conferring on Sikkim the status of an associate State of Indian Union. Consequent amendments were made to Articles 80 and 81. A new schedule, i.e., the Tenth Schedule, was added laying down terms and conditions of association of Sikkim with the Union.

36. The Constitution (Thirty-sixth Amendment) Act, 1975—It was enacted to make Sikkim a full-fledged State of Indian Union and to include it in the First Schedule to the Constitution and to allot to Sikkim one seat each in the Council of States and in the House of the People. Article 2A and the Tenth Schedule inserted by the Constitution (Thirty-fifth Amendment) Act were omitted and Articles 80 and 81 were suitably amended.

37. The Constitution (Thirty-seventh Amendment) Act, 1975—By this Act, Union Territory of Arunachal Pradesh was provided with a Legislative Assembly. Article 240 of the Constitution was also amended to provide that as in the case of other union territories with Legislatures, the power of President to make regulations for the Union Territory of Arunachal Pradesh may be exercised only when the assembly is either dissolved or its functions remain suspended.

38. The Constitution (Thirty-eighth Amendment) Act, 1975—This Act amended Articles 123, 213 and 352 of the Constitution to provide that the

satisfaction of President or Governor contained in these Articles would be called in question in any court of law.

39. The Constitution (Thirty-ninth Amendment) Act, 1975—By this Act, disputes relating to the election of President, Vice-President, Prime Minister and Speaker are to be determined by such authority as may be determined by Parliamentary Law. Certain central enactments were also included in the Ninth Schedule by this Act.

40. The Constitution (Fortieth Amendment) Act, 1976—This Act provided for vesting in the Union of all mines, minerals and other things of value lying in the ocean within the territorial waters or the continental shelf or the exclusive economic zone of India. It further provided that all other resources of the exclusive economic zone of India shall also vest in the Union. This Act also provided that the limits of the territorial waters, the continental shelf, the exclusive economic zone and the maritime zones of India shall be as specified from time to time by or under any law made by Parliament. Also some more Acts were added to the Ninth Schedule.

41. The Constitution (Forty-first Amendment) Act, 1976—By this Act, Article 316 was amended to raise the retirement age of Members of State Public Service Commissions and Joint Public Service Commissions from 60 to 62 years.

42. The Constitution (Forty-second Amendment) Act, 1976—This Act made a number of important amendments in the Constitution. These amendments were mainly for the purpose of giving effect to the recommendations of Swaran Singh Committee.

Some of the important amendments made are for the purpose of spelling out expressly the high ideals of socialism, secularism and the integrity of the nation, to make the Directive Principles more comprehensive and giving them precedence over those Fundamental Rights which have been allowed to be relied upon to frustrate socio-economic reforms. The amendment Act also inserted a new chapter on the Fundamental Duties of citizens and made special provisions for dealing with anti-national activities, whether by individuals or by associations. The judiciary provisions were also amended by providing for a requirement as to the minimum number of judges for determining question as to the constitutional validity of law and for a special majority

of not less than two-third for declaring any law to be constitutionally invalid.

To reduce the mounting arrears in High Courts and to secure the speedy disposal of service matters, revenue matters and certain other matters of special importance in the context of socio-economic development and progress, this amendment Act provided for the creation of Administrative and other tribunals for dealing with such matters while preserving the jurisdiction of the Supreme Court in regard to such matters under Article 136 of the Constitution. Certain modifications in the writ jurisdiction of High Courts under Article 226 were also made.

43. The Constitution (Forty-third Amendment) Act, 1977—This Act, inter alia, provided for the restoration of the jurisdiction of the Supreme Court and High Courts, curtailed by the enactment of the Constitution (Forty-second Amendment) Act, 1976 and accordingly Articles 32A, 131 A, 144A, 226A and 228A included in the Constitution by the said amendment, were omitted by this Act. The Act also provided for the omission of Article 31 which conferred special powers on Parliament to enact certain laws in respect of anti-national activities.

44. The Constitution (Forty-fourth Amendment) Act, 1978—This amendment removed right to property from the list of fundamental rights and made it a legal right. Necessary amendments were made in article 19 to ensure that removal of property from the list of fundamental rights would not affect the right of minorities to establish and administer educational institutions of their choice.

Article 352 of the Constitution was amended to provide “armed rebellion” as one of the circumstances for declaration of emergency. Internal disturbance not amounting to armed rebellion would not be a ground for the issuance of a Proclamation. The right to personal liberty as contained in Articles 21 and 22 is further strengthened by the provision that a law for preventive detention cannot authorise, in any case, detention for a longer period than two months unless an Advisory Board has reported that there is sufficient cause for such detention. The additional safeguard has also been provided by the requirements that Chairman of an Advisory Board shall be a serving Jude of the appropriate High Court and that the Board shall be constituted in accordance with the recommendations of the Chief Justice of that High Court.

With a view to avoid delays, Articles 132 and 134 were amended and a new Article 134A was inserted to provide that a High Court should consider the question of granting a certificate for appeal to Supreme Court immediately after the delivery of the judgement, final order or sentence concerned on the basis of an oral application by a party or, if the High Court deems it so to do, on its own. The other amendments made by the Act are mainly for removing or correcting the distortions which came into the Constitution by reason of the amendment initiated during the period of internal emergency.

45. The Constitution (Forty-fifth Amendment) Act, 1980—The Act was passed to extend safeguards in respect of reservation of seats in Parliament and State Assemblies for Scheduled Castes, Scheduled Tribes as well as for Anglo-Indians for a further period of ten years till the year 1990.

46. The Constitution (Forty-sixth Amendment) Act, 1982—Article 269 was amended so that the tax levied on the consignment of goods in the course of inter-state or commerce shall be assigned to the states. This Article was also amended to enable Parliament to formulate by law principle for determining when a consignment of goods takes place in the course of inter-state trade or commerce. A new entry 92B was also inserted in the Union List to enable the levy of tax on the consignment of goods where such consignment takes place in the course of inter-state trade or commerce.

Clause (3) of Article 286 was amended to enable Parliament to specify, by law, restrictions and conditions in regard to the system of levy rates and other incidence of tax on the transfer of goods involved in the execution of a works contract, on the delivery of goods on hire-purchase or any system of payment of instalments, etc.

Article 366 was also suitably amended to insert a definition of "tax on the sale or purchase of goods" to include transfer for consideration of controlled commodities, transfer of property in goods involved in the execution of a works contract, delivery of goods on hire-purchase or any system of payment by instalments, etc.

47. The Constitution (Forty-seventh Amendment) Act, 1984—This amendment was intended to provide for the inclusion of certain land Reforms Acts in the Ninth Schedule to the Constitution with a view to

obviating the scope of litigation hampering the implementation process of those Acts.

48. The Constitution (Forty-eighth Amendment) Act, 1984—The Proclamation issued by President under Article 356 of the Constitution with respect to the State of Punjab cannot be continued in force for more than one year unless the special conditions mentioned in clause (5) of the said Article are satisfied. As it is felt that the continued force of the said Proclamation is necessary, therefore, the present amendment had been effected so as to make the conditions mentioned in clause (5) of Article 356 inapplicable in the instant case.

49. The Constitution (Forty-ninth Amendment) Act, 1984—Tripura Government recommended that the provisions of the Sixth Schedule to the Constitution may be made applicable to tribal areas of that state. The amendment involved in this Act is intended to give constitutional security to the autonomous District Council functioning in the State.

50. The Constitution (Fiftieth Amendment) Act, 1984—By Article 33 of the constitution, Parliament is empowered to enact laws determining to what extent any of the rights conferred by Part III of the constitution shall, in their application to the members of the armed forces or the forces charged with the maintenance of public order, be restricted or abrogated so as to ensure proper discharge of their duties and maintenance of discipline among them.

It was proposed to amend Article 33 so as to bring within its ambit:

(i) the members of the Force charged with the protection of property belonging to or in the charge or possession of the state; or

(ii) persons employed in any bureau or other organisation established by the state for purposes of intelligence or counter-intelligence; or

(iii) persons employed in or in connection with the telecommunication systems set up for the purposes of any Force, bureau or organisation.

Experience has revealed that the need for ensuring proper discharge of their duties and maintenance of discipline among them is of paramount importance in the national interest.

51. The Constitution (Fifty-first Amendment) Act, 1984—Article 330 was amended by this Act for providing reservation of seats for Scheduled Tribes in Meghalaya, Nagaland, Arunachal Pradesh and Mizoram in

Parliament and Article 332 was amended to provide similar reservation in the Legislative Assemblies of Nagaland and Meghalaya to meet the aspirations of local tribal population.

52. The Constitution (Fifty-second Amendment) Act, 1985—It provided provisions related to anti-defection, by disqualification of members from Parliament and Assembly in case of defection from one party to other. Articles 101, 102, 190, 191 were amended and the Tenth Schedule was inserted in the Constitution to lay down the process by which legislators may be disqualified. The Act also makes suitable provisions with respect to splits in and merger of political parties.

53. The Constitution (Fifty-third Amendment) Act, 1986—This Act was enacted to give effect to the Memorandum of Settlement of Mizoram which was signed by Government of India and Mizoram Government with Mizoram National Front on 30th June 1986. For this purpose, a new Article 371 G has been inserted in the Constitution inter alia preventing application of any Act of Parliament in Mizoram in respect of religious or social practices of Mizos, Mizos' customary law and procedure, administration of civil and criminal practice involving decisions according to Mizos' customary law and ownership and transfer of land unless a resolution is passed in the Legislative Assembly to that effect. This, however, will not apply to any Central Act already in force in Mizoram before the commencement of this amendment. The new Article also provides that the Legislative Assembly of Mizoram shall consist of not less than 40 members.

54. The Constitution (Fifty-fourth Amendment) Act, 1986—This Act increased the salaries of Supreme Court and High Court judges.

Chief Justice of India: 10,000 per month

Judges of Supreme Court: 9,000 per month

Chief Justice of High Court: 9,000 per month

Judges of High Court: 8,000 per month

This Act amended Part 'D' of the Second Schedule to the Constitution to give effect to the increases in the salaries of judges and to make an enabling provision in Articles 125 and 221 to provide for changes in the salaries of judges in future by Parliament by law.

55. The Constitution (Fifty-fifth Amendment) Act, 1986—The Act gave effect to the proposal of government of India to confer statehood on the Union Territory of Arunachal Pradesh and provided special powers to Governor consequent to formation of the new state. A new Article 371 H was inserted which provides that the Legislative Assembly of the new State of Arunachal Pradesh shall consist of not less than thirty members.

56. The Constitution (Fifty-sixth Amendment) Act, 1987— The Government of India proposed to constitute the territories comprised in Goa District of the Union Territory of Goa, Daman and Diu as the State of Goa and the territories comprised in Daman and Diu districts of that Union Territory as a new Union Territory of Daman and Diu. The Act, therefore, entails the transition provision to enable formation of the state of Goa. Article 3711 was inserted to ensure that the Legislative Assembly of the new State of Goa shall consist of not less than thirty members.

57. The Constitution (Fifty-seventh Amendment) Act, 1987—This Act provided for reservation of seats in the house of the people for Scheduled Tribes in Nagaland, Meghalaya, Mizoram and Arunachal Pradesh and also for reservation of seats for Scheduled Tribes in the legislative assemblies of Nagaland and Meghalaya by amending Article 332. Even though these states are predominantly tribal, the underlying objective of the Act was to ensure that the members of Scheduled Tribes in these areas do not fail to secure a minimal representation because of their inability to compete with the advanced sections of the people.

58. The Constitution (Fifty-eighth Amendment) Act, 1987—This amendment empowers the President of India to publish, under his authority, the translation of the Constitution in Hindi signed by the Members of the Constituent Assembly with such modification as may be necessary to bring it in conformity with the language, style and terminology adopted in the authoritative texts of Central Acts in Hindi language. President has also been authorised to publish the translation in Hindi of every amendment of the Constitution made in English.

59. The Constitution (Fifty-ninth Amendment) Act, 1988—The Act amended Article 365(5) of the Constitution so as to facilitate the extension of a Presidential Proclamation issued under clause (1) of Article 356 beyond a period of one year, if necessary upto a period of three years, as permissible under clause (4) of Article 356 with respect to

the State of Punjab because of the continued disturbed situation there. The Act also amended Article 352 of the Constitution pertaining to the Proclamation of Emergency in its application to the State of Punjab and includes internal disturbance as one of the grounds for making a Proclamation in respect of the State of Punjab only. As a result, the amendments proposed in Articles 352,358 and 359 in relation to the State of Punjab were made to be operative only for a period of two years from 30 March 1988, which is the date of commencement of the amendment.

60. The Constitution (Sixtieth Amendment) Act, 1988—The Act amended clause (2) of Article 276 of the Constitution so as to increase the ceiling of taxes on professions, trades, callings and employment from Rs 250 per annum to Rs 2,500 per annum. The upward revision of this tax will help state governments in raising additional resources. The proviso to clause (2) has been omitted.

61. The Constitution (Sixty-first Amendment) Act, 1989—The Act provides for reducing voting age from 21 to 18 years by amending Article 326 of the Constitution to provide to the unrepresented youth of the country an opportunity to give vent to their feelings and help them become a part of political process.

62. The Constitution (Sixty-second Amendment) Act, 1989—Article 334 of the Constitution lays down that the provisions of the Constitution relating to the reservation of seats for the Scheduled Castes and the Scheduled Tribes and the representation of the Anglo-Indian community by nomination in the Lok Sabha and in the Legislative Assemblies of the States shall cease to have effect on the expiry of a period of 40 years from the commencement of the Constitution in 1950. Although the Scheduled Castes and the Scheduled Tribes have made considerable progress in the last 40 years, the reasons which weighed with the Constituent Assembly in making provisions with regard to the aforesaid reservation of seats and nomination of members, have not ceased to exist. The Act amends Article 334 of the Constitution to continue the reservation for the Scheduled Castes and the Scheduled Tribes and the representation of the Anglo-Indians by nomination for a further period of ten years, till the year 2000.

63. The Constitution (Sixty-third Amendment) Act, 1989—The Constitution (Fifty-ninth Amendment) Act, 1988 was enacted in March

1988 making certain changes in regard to making a Proclamation of Emergency in Punjab and to the duration of President's rule in State. On reconsideration, the Government decided that the special powers in regard to the proclamation of Emergency in Punjab as envisaged in the said amendment is no longer required. Accordingly the provision to clause (5) of Article 356 and Article 359A of the Constitution were omitted through the Constitution (Sixty-third Amendment) Act.

64. The Constitution (Sixty-fourth Amendment) Act, 1990—This Act amended clauses (4) and (5) of Article 356 of the Constitution with a view to facilitate the extension of the proclamation issued under clause (1) of Article 356 of the Constitution on 11th May 1987 upto a total period of three years and six months in relation to the State of Punjab.

65. The Constitution (Sixty-fifth Amendment) Act, 1990—Article 338 of the Constitution provides for a Special Officer for the Scheduled Castes and Scheduled Tribes to investigate all matters relating to the safeguards provided for the Scheduled Castes and Scheduled Tribes under the Constitution and to report to the President on their working. This Article has been amended for the constitution of a National Commission for Scheduled Castes and Scheduled Tribes consisting of a Chairperson, Vice Chairperson and five other Members who shall be appointed by the President by warrant under his hand and seal. The amended Article elaborates the duties of the said Commission and covers measures that should be taken by the Union or any state for the effective implementation of the reports presented by the Commission. It also provides that the Commission shall, while investigating any matter or inquiring into any complaint, have all the powers of a Civil Court trying a suit and the reports of the said Commission shall be laid before Parliament and the Legislature of the states.

66. The Constitution (Sixty-sixth Amendment) Act, 1990—The Act protects 55 State Acts relating to land reforms and ceiling on agricultural land holdings enacted by States of Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and administration of the Union Territory of Puducherry, from challenge in courts, by including them in the Ninth Schedule to the Constitution.

67. The Constitution (Sixty-seventh Amendment) Act, 1990—The three year period in the case of proclamation issued on 11th May 1987 with respect to the State of Punjab was extended to three years and six months by the Constitution (Sixty-fourth Amendment) Act, 1990. This Act amended clause (4) of Article 356 to further extend the period up to a total period of four years.

68. The Constitution (Sixty-eighth Amendment) Act, 1991—The three year period in the case of proclamation issued on 11th May 1987 with respect to the State of Punjab was earlier extended to four years by the Constitution (sixty-seventh Amendment) Act, 1990. This Act further amends clause (4) of Article 356 so as to further extend the period up to a total period of five years.

69. The Constitution (Sixty-ninth Amendment) Act, 1991—This Act brought qualitative change in the governance of Delhi. Articles 239AA and 239AB were inserted to accord special dispensation to Delhi by allowing Legislative Assembly and the Council of Ministers for National Capital of Delhi while it continued to be a Union Territory. With this, the Union territory of Delhi was renamed as the National Capital Territory of Delhi with the Lieutenant Governor, appointed under article 239, as its administrator.

70. The Constitution (Seventieth Amendment) Act, 1992—While considering the (Seventy-fourth Amendment) Bill, 1991 and the Government of National Capital Territory Bill, 1991, views were expressed in both the Houses of Parliament in favour of including the elected members of the legislative assemblies of union territories in the electoral college for the election of the President under Article 54 of the Constitution.

At present, Article 54 relating to the election of the President provides for an electoral college consisting of only the elected Members of Parliament as well as the legislative assemblies of the states (not of union territories). Similarly, Article 55 providing for the manner of such election also speaks of legislative assemblies of states.

Accordingly, an Explanation was inserted in Article 54 to provide that reference to 'state' in Article 54 and 55 would include the National Capital Territory of Delhi and the Union Territory of Puducherry for constituting the electoral college for election of the President. This

enabled the inclusion of elected members, of the Legislative Assembly created for the Union Territory of Puducherry under the provisions of Article 239A and of the proposed Legislative Assembly of the National Capital Territory of Delhi under Article 239AA, in the electoral college for Presidential election.

71. The Constitution (Seventy-first Amendment) Act, 1992—There have been demands for inclusion of certain languages in the Eighth Schedule to the Constitution. This Act amends the Eighth Schedule to the Constitution to include Konkani, Manipuri and Nepali languages in the Eighth Schedule to the Constitution.

72. The Constitution (Seventy-second Amendment) Act, 1992—For restoring peace and harmony in the areas of the state of Tripura where disturbed conditions prevailed, a Memorandum of Settlement was signed by the Government of India with Tripura National Volunteers on 12 August 1988.

In order to implement the said Memorandum, Article 332 of the Constitution has been amended by the Constitution (Seventy-second Amendment) Act, 1992 for making a temporary provision for the determination of the number of seats reserved for the Scheduled Tribes in the State Assembly of Tripura, until the re-adjustment of seats is made on the basis of the first Census after the year 2000 under Article 170 of the Constitution.

73. The Constitution (Seventy-third Amendment) Act, 1993—The 73rd amendment came into force to give constitutional status to the Panchayat Raj institutions. Article 40 of the Constitution which enshrines one of the Directive Principles of State Policy lays down that the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government. Therefore, a new Part IX relating to the Panchayats was inserted in the Constitution to provide for, among other things, Gram Sabha in a village or group of villages; constitution of Panchayats at village and other level or levels; direct elections to all seats in Panchayats at the village and intermediate level, if any and to the offices of Chairpersons of Panchayats at such levels; reservation of seats for the Scheduled Castes and Scheduled Tribes in proportion to their population for membership of Panchayats and office of Chairpersons in Panchayats

at each level; reservation of not less than one-third of the seats for women; fixing tenure of five years for Panchayats and holding elections within a period of six months in the event of supersession of any Panchayat.

74. The Constitution (Seventy-fourth Amendment) Act, 1993—The 74th Amendment made statutory provisions for local administrative bodies in urban areas such as towns and cities. A new part IX-A relating to the municipalities was incorporated in the Constitution to provide for constitution of three types of municipalities - Nagar Panchayats for areas in transition from a rural area to urban area, Municipal Councils for smaller urban areas and Municipal Corporations for larger urban areas.

75. The Constitution (Seventy-fifth Amendment) Act, 1994—The operation of the Rent Control legislations in various states suffered from major weaknesses. This Act amends Article 323B in Part XIVA of the Constitution so as to give timely relief to the rent litigants by providing for setting up of State-level Rent Tribunals in order to reduce the tiers of appeals and to exclude the jurisdiction of all courts, except that of the Supreme Court, under article 136 of the Constitution.

76. The Constitution (Seventy-sixth Amendment) Act, 1994—The policy of reservation of seats in educational institutions and reservation of appointments or posts in public services for Backward Classes, Scheduled Castes and Scheduled Tribes has had a long history in Tamil Nadu dating back to the year 1921. The extent of reservation has been increased by the State Government from time to time, consistent with the needs of the majority of the people and it has now reached the level of 69 per cent (18 per cent Scheduled Castes, one per cent Scheduled Tribes and 50 per cent Other Backward Classes).

The Supreme Court in Indira Sawhney and others vs. Union of India and others (AIR, 1993 SC 477) on 16th November 1992 ruled that the total reservations under Article 16(4) should not exceed 50 per cent.

The Tamil Nadu Government enacted a legislation, namely, Tamil Nadu Backward Classes, Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institution and of appointments or posts in the Services under the State) Bill, 1993 and forwarded it to the Government of India for consideration of the President of India in terms of Article 31 C of the Constitution. The Government of India supported

the provision of the State legislation by giving the President's assent to the Tamil Nadu Bill. As a corollary to this decision, it was necessary that the Tamil Nadu Act 45 of 1994 was brought within the purview of the Ninth Schedule to the Constitution so that it could get protection under Article 31 B of the Constitution with regard to the judicial review.

The Act amends the Ninth Schedule to the Constitution to enable continuance of 69 per cent reservation in the state by including the relevant Tamil Nadu act under that schedule.

77. The Constitution (Seventy-seventh Amendment) Act, 1995—The Scheduled Castes and the Scheduled Tribes have been enjoying the facility of reservation in promotion since 1955. The Supreme Court in its judgement dated 16th November 1992 in the case of Indira Sawhney and others vs. Union of India and others, however, observed that reservation of appointments or posts under Article 16(4) of the Constitution is confined to initial appointment and cannot extend to reservation in the matter of promotion. This ruling of the Supreme Court adversely affects the interests of the Scheduled Castes and the Scheduled Tribes. Since the representation of the Scheduled Castes and the Scheduled Tribes in services in the States had not reached the required level, it was considered necessary to protect the reservation to Scheduled Castes and Scheduled Tribes employees in promotions. The Act, therefore, amended Article 16 of the Constitution.

78. The Constitution (Seventy-eighth Amendment) Act, 1995—Article 31B of the Constitution confers on the enactments included in the Ninth Schedule to the Constitution immunity from legal challenge on the ground that they violate the fundamental rights enshrined in Part III of the Constitution. The Schedule consists of list of laws enacted by various State Governments and Central Government which, inter alia, affect rights and interest in property including land.

In the past, whenever, it was found that progressive legislation conceived in the interest of the public was imperiled by litigation, recourse was taken to the Ninth Schedule. Accordingly, several State enactments relating to land reforms and ceiling on agricultural land holdings have already been included in the Ninth Schedule. Since, the Government is committed to give importance to land reforms, it was decided to include land reform laws in the Ninth Schedule so that they

are not challenged before the courts. The State Governments of Bihar, Karnataka, Kerala, Orissa, Rajasthan, Tamil Nadu and West Bengal had suggested the inclusion of some of their Acts relating to land reforms in the Ninth Schedule.

Since the amendment to Acts which are already placed in the Ninth Schedule are not automatically immunised from legal challenge, a number of amending Acts along with a few principal Acts have been included in the Ninth Schedule so as to ensure that implementation of these Acts is not adversely affected by litigation.

79. The Constitution (Seventy-ninth Amendment) Act, 1999—By this Act, the Government extended the reservations of seats for the Scheduled Castes and the Scheduled Tribes as well as for the Anglo-Indians in the House of the People and in the Legislative Assemblies of the states for another ten years till 2010.

80. The Constitution (Eightieth Amendment) Act, 2000—Based on the recommendations of the Tenth Finance Commission, an alternative scheme for sharing taxes between the Union and the States has been enacted by the Constitution (Eightieth Amendment) Act, 2000. Under the new scheme of devolution of revenue between Union and the States, 26 per cent out of gross proceeds of Union taxes and duties is to be assigned to the States in lieu of their existing share in the income-tax, excise duties, special excise duties and grants in lieu of tax on railway passenger fares.

81. The Constitution (Eighty-first Amendment) Act, 2000—By this amendment, the unfilled vacancies of a year which were reserved for the Scheduled Castes and the Scheduled Tribes for being filled up in that year in accordance with any provision for reservations made under Article 16 of the Constitution, shall be considered as a separate class of vacancies to be filled up in any succeeding year or years, and such class of vacancies shall not be considered together with the vacancies of the year in which they were filled up for determining the ceiling of fifty per cent reservation against total number of vacancies of that year.

82. The Constitution (Eighty-second Amendment) Act, 2000—The amendment provides that nothing in Article 335 shall prevent the State from making any provision in favour of the members of the Scheduled Castes and the Scheduled Tribes for relaxation in qualifying marks in any

examination or lowering the standards of evaluation for reservation in matters of promotion to any class or classes of services or posts in connection with affairs of the Union or of a State.

83. The Constitution (Eighty-third Amendment) Act, 2000—The Act amended Article 243M of the Constitution to provide that no reservation in Panchayats need be made in favour of the Scheduled Castes in Arunachal Pradesh wholly inhabited by tribal population.

84. The Constitution (Eighty-fourth Amendment) Act, 2001—The Act amended provisos to articles 82 and 170(3) of the Constitution to readjust and rationalise the territorial constituencies in the States, without altering the number of seats allotted to each State in House of People and Legislative Assemblies of the States, including the Scheduled Castes and Scheduled Tribes constituencies, on the basis of 1991 census population figures. It also refixed the number of seats reserved for the Scheduled Castes and the Scheduled Tribes in the House of the People and the Legislative Assemblies of the States on the basis of 1991 census so as to remove the imbalance caused due to uneven growth of population/electorate in different constituencies.

85. The Constitution (Eighty-fifth Amendment) Act, 2001—This Act amended article 16(4A) of the Constitution to provide for consequential seniority in the case of promotion by virtue of rule of reservation for the Government servants belonging to the Scheduled Castes and the Scheduled Tribes, with effect from 17th day of June 1995.

86. The Constitution (Eighty-sixth Amendment) Act, 2002—The Act led to insertion of a new article 21A after article 21. The new article 21A deals with Right to Education that “the State shall provide free and compulsory education to all children of the age of six to fourteen years”. It amends Article 45 and 51A to add provision for early childhood care and education to children below the age of six years.

87. The Constitution (Eighty-seventh Amendment) Act, 2003 - The Act amended Articles 81, 82, 170 and 330 to extend the usage of 2001 national census population figures for state-wise distribution of parliamentary seats.

88. The Constitution (Eighty-eighth Amendment) Act, 2003 - It amended Article 270 and inserted Article 268A in order to extend statutory cover

for levy and utilisation of service tax. It also amended the Seventh Schedule to the Constitution.

89. The Constitution (Eighty-ninth Amendment) Act, 2003 - This amendment led to bifurcation of the National Commission for Scheduled Castes and Scheduled Tribes into the National Commission for Scheduled Castes and the National Commission for Scheduled Tribes. It amended Articles 338 and inserted Article 338A. It further defined the composition, responsibilities and powers of the two commissions.

90. The Constitution (Ninetieth Amendment) Act, 2003 - This Act amended Article 332 to make provisions regarding protection of rights of the non-tribals, the existing representation of the Scheduled Tribes and non-Scheduled Tribes, from the Bodoland Territorial Areas in the Assam Legislative Assembly. Article 332 of the Constitution of India provides for reservation of seats for the Scheduled Castes and the Scheduled Tribes in the Legislative Assemblies of the States. Clause (6) of article 332 stipulates that no person who is not a member of a Scheduled Tribe of any autonomous district of the State of Assam shall be eligible for election to the Legislative Assembly of the State from any constituency of that district. Therefore, a proviso in clause (6) of article 332 of the Constitution was inserted.

91. The Constitution (Ninety-first Amendment), Act, 2003 - The Act amended Article 75 and 164 and inserted Article 361B. The amendment restricts the size of the Council of Ministers in the Union Government and in a State Government to fifteen per cent of the total number of legislative members. It aims at strengthening the Anti-Defection laws. It also amended the Tenth Schedule to the constitution to bring split of political parties within the purview of disqualification based on defection.

92. The Constitution (Ninety-second Amendment) Act, 2003—It amended Eighth Schedule of the Constitution to include Bodo, Dogri, Santali and Maithali as official languages.

93. The Constitution (Ninety-third Amendment) Act, 2006—The Act aims to provide greater access to higher education including professional education to a larger number of students belonging to the Scheduled Castes and Scheduled Tribes. It amended Article 15 to enable provision

of 27 per cent reservation for other backward classes in government as well as private educational institutions.

94. The Constitution (Ninety-fourth Amendment) Act, 2006—The Act provides for a Minister of Tribal Welfare in newly created states of Jharkhand and Chhattisgarh.

95. The Constitution (Ninety-fifth Amendment) Act, 2009—It amended Article 334 to extend the reservation of the seats for SCs and STs in the Lok Sabha and State Assemblies from sixty years to seventy years till 2020.

96. The Constitution (Ninety-Sixth Amendment) Act, 2011—The amendment substituted the word "Odia" for the word "Oriya" in entry 15 in the Eighth Schedule to the Constitution.

97. The Constitution (Ninety-Seventh Amendment) Act, 2011—It led to the addition of the words "Or Co-operative Societies" after the world "Or Unions" in Article 19(i)(c) and insertion of article 43B, i.e. Promotion of Co-operative Societies and added Part IXB, i.e. The Co-operative Societies. The objective of the amendment is to ensure autonomous and democratic functioning of cooperatives and fix the accountability of the management to the members and stakeholders.

98. The Constitution (Ninety-Eighth Amendment) Act, 2012—Article 371J was inserted in the constitution through this Act. The objective was to empower the Governor of Karnataka to take steps to develop the Hyderabad-Karnataka region.

99. The Constitution (Ninety-Ninth Amendment) Act, 2014 - This Act led to the insertion of new Articles 124A, 124B and 124C after Article 124 of the Constitution. The Act also provided for the composition and the functions of the proposed National Judicial Appointments Commission.

100. The Constitution (One Hundredth Amendment) Act, 2015—It amended the First Schedule of the Constitution, for the purpose of giving effect to the acquiring of territories by India and transfer of territories to Bangladesh through retaining of adverse possession and exchange of enclaves, in pursuance of the agreement between India and Bangladesh concerning the demarcation of the land boundary, signed on 16th May 1974 and its protocol, signed on 6th September, 2011.

101. The Constitution (One Hundred and First Amendment) Act, 2016— The Act amended the constitution to introduce "The Goods and Services Tax (GST)". It amended the articles 248, 249, 250, 268, 269, 270, 271, 286, 366 and 368. It also amended the Sixth and Seventh Schedules. Article 268A was omitted and new Articles 246A (Special provision with respect to goods and services tax), 269A (Levy and collection of goods and services tax in course of inter-State trade or commerce) and 279A (Goods and Services Tax Council) were inserted. The Act also provided for compensation to states for loss of revenue on account of introduction of goods and services tax.

102. The Constitution (One Hundred and Second Amendment) Act, 2018 - The Act provided constitutional status to the National Commission for Backward Classes (NCBC). Two new articles 338B and 342A along with clause 26C in article 366 that defines socially and educationally backward classes were inserted and article 340 has been omitted.

With this, the NCBC will have all the powers of a civil court. It has the authority to examine complaints and welfare measures regarding socially and educationally backward classes. Its powers include summoning and enforcing the attendance of any person from any part of the country and examining him on oath. It can ask for production of documents and receive evidence on affidavits.

103. The Constitution (One Hundred and Third Amendment) Act, 2019 - The Act introduced ten per cent reservation for economically weaker sections (EWS) from the upper castes of the society in central government jobs as well as admission in central government-run and private educational institutions. The amendment does not make such reservations mandatory in state government-run educational institutions or state government jobs. This reservation is in addition to the existing reservations and subject to a maximum of ten per cent of the total seats in each category. It amended Articles 15 and 16 of the Constitution.

Source: http://indiacode.nic.in

Appendices

GOVERNMENT OF INDIA

Shri Ram Nath Kovind—President
Shri M. Venkaiah Naidu—Vice-President

COUNCIL OF MINISTERS

(As on December 15, 2020) [1]

Shri Narendra Modi	Prime Minister and also in-charge of: Ministry of Personnel, Public Grievances and Pensions; Department of Atomic Energy; Department of Space; and All important policy issues and all other portfolios not allocated to any Minister

CABINET MINISTERS

Shri Raj Nath Singh	Minister of Defence
Shri Amit Shah	Minister of Home Affairs
Shri Nitin Jairam Gadkari	Minister of Road Transport & Highways; and Minister of Micro, Small Medium Enterprises
Shri D.V. Sadananda Gowda	Minister of Chemicals and Fertilizers
Smt. Nirmala Sitharaman	Minister of Finance; and Minister of Corporate Affairs
Shri Narendra Singh Tomar	Minister of Agriculture & Farmers Welfare; Minister of Rural Development; Minister of Panchayati Raj; and Minister of Food Processing Industries
Shri Ravi Shankar Prasad	Minister of Law and Justice; Minister of Communications; Minister of Electronics and Information Technology
Shri Thaawar	Minister of Social Justice and Empowerment

Chand Gehlot	
Dr. Subrahmanyam Jaishankar	Minister of External Affairs
Shri Ramesh Pokhriyal ‘Nishank’	Minister of Education
Shri Arjun Munda	Minister of Tribal Affairs
Smt. Smriti Zubin Irani	Minister of Women and Child Development; and Minister of Textiles
Dr. Harsh Vardhan	Minister of Health and Family Welfare; Minister of Science and Technology; and Minister of Earth Sciences
Shri Prakash Javadekar	Minister of Environment, Forest and Climate Change; Minister of Information and Broadcasting; and Minister of Heavy Industries and Public Enterprises
Shri Piyush Goyal	Minister of Railways; Minister of Commerce and Industry; and Minister of Consumer Affairs, Food and Public Distribution
Shri Dharmendra Pradhan	Minister of Petroleum and Natural Gas; and Minister of Steel
Shri Mukhtar Abbas Naqvi	Minister of Minority Affairs
Shri Pralhad Joshi	Minister of Parliamentary Affairs; Minister of Coal; and Minister of Mines
Dr. Mahendra Nath Pandey	Minister of Skill Development and Entrepreneurship
Shri Giriraj Singh	Minister of Fisheries, Animal Husbandry and Dairying
Shri Gajendra Singh Shekhawat	Minister of Jal Shakti

MINISTERS OF STATE (Independent Charge)

Shri Santosh Kumar Gangwar	Minister of State (Independent Charge) in the Ministry of Labour and Employment
Shri Rao Inderjit Singh	Minister of State (Independent Charge) in the Ministry of Statistics and Programme Implementation; and Minister of State (Independent Charge) in the Ministry of Planning
Shri Shripad Yesso Naik	Minister of State (Independent Charge) in the Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH); and Minister of State in the Ministry of Defence
Dr. Jitendra Singh	Minister of State (Independent Charge) in the Ministry of Development of North Eastern Region, Minister of State in the Prime Minister's Office; Minister of State in the Ministry of Personnel, Public Grievances and Pensions; Minister of State in the Department of Atomic Energy; and Minister of State in the Department of Space
Shri Kiren Rijiju	Minister of State (Independent Charge) in the Ministry of Youth Affairs and Sports; and Minister of State in the Ministry of Minority Affairs
Shri Prahalad Singh Patel	Minister of State (Independent Charge) in the Ministry of Culture; Minister of State (Independent Charge) in the Ministry of Tourism
Shri Raj Kumar Singh	Minister of State (Independent Charge) in the Ministry of Power; Minister of State (Independent Charge) in the Ministry of New and Renewable Energy; and Minister of State in the Ministry of Skill Development and Entrepreneurship
Shri Hardeep Singh Puri	Minister of State (Independent Charge) of the Ministry of Housing and Urban Affairs; Minister of State (Independent Charge) in the Ministry of Civil Aviation; and Minister of State in the Ministry of Commerce and Industry
Shri Mansukh Mandaviya	Minister of State (Independent Charge) in the Ministry of Ports, Shipping and Waterways; and Minister of State in the Ministry of Chemicals and Fertilizers

MINISTERS OF STATE

Shri Faggansingh Kulaste	Minister of State in the Ministry of Steel
Shri Ashwini Kumar Choubey	Minister of State in the Ministry of Health and Family Welfare
Shri Arjun Ram Meghwal	Minister of State in the Ministry of Parliamentary Affairs; Minister of State in the Ministry of Heavy Industries and Public Enterprises
General (Retd.) V.K. Singh	Minister of State in the Ministry of Road Transport and Highways
Shri Krishan Pal	Minister of State in the Ministry of Social Justice and Empowerment
Shri Danve Raosaheb Dadarao	Minister of State in the Ministry of Consumer Affairs, Food and Public Distribution
Shri G. Kishan Reddy	Minister of State in the Ministry of Home Affairs
Shri Parshottam Rupala	Minister of State in the Ministry of Agriculture & Farmers Welfare
Shri Ramdas Athawale	Minister of State in the Ministry of Social Justice and Empowerment
Sadhvi Niranjan Jyoti	Minister of State in the Ministry of Rural Development
Shri Babul Supriyo	Minister of State in the Ministry of Environment, Forest and Climate Change
Shri Sanjeev Kumar Balyan	Minister of State in the Ministry of Fisheries, Animal Husbandry and Dairying
Shri Dhotre Sanjay Shamrao	Minister of State in the Ministry of Education; Minister of State in the Ministry of Communications; and Minister of State in the Ministry of Electronics and Information Technology

Shri Anurag Singh Thakur	Minister of State in the Ministry of Finance; and Minister of State in the Ministry of Corporate Affairs
Shri Nityanand Rai	Minister of State in the Ministry of Home Affairs
Shri Rattan Lal Kataria	Minister of State in the Ministry of Jal Shakti; and Minister of State in the Ministry of Social Justice and Empowerment
Shri V. Muraleedharan	Minister of State in the Ministry of External Affairs; and Minister of State in the Ministry of Parliamentary Affairs
Smt. Renuka Singh Saruta	Minister of State in the Ministry of Tribal Affairs
Shri Som Parkash	Minister of State in the Ministry of Commerce and Industry
Shri Rameshwar Teli	Minister of State in the Ministry of Food Processing Industries
Shri Pratap Chandra Sarangi	Minister of State in the Ministry of Micro, Small and Medium Enterprises; and Minister of State in the Ministry of Fisheries, Animal Husbandry and Dairying
Shri Kailash Choudhary	Minister of State in the Ministry of Agriculture & Farmers Welfare
Sushri Debasree Chaudhuri	Minister of State in the Ministry of Women and Child Development

MEMBERS OF PARLIAMENT

RAJYA SABHA (Statewise List as on December 15, 2020)

Chairman	**Shri M. Venkaiah Naidu**
Deputy Chairman	**Harivansh Narayan Singh**

Name	Party/Group
STATES	
ANDHRA PRADESH (11)	
1. Reddy, Shri Ayodhya Rami	YSRCP

2. Pilli, Shri Subhas Chandra Bose	YSRCP
3. Chowdary, Shri Y. S.	BJP
4. Kanakamedala, Shri Ravindra Kumar	TDP
5. Mopidevi, Shri Venkataramana Rao	YSRCP
6. Nathwani, Shri Parimal	YSRCP
7. Prabhu, Shri Suresh	BJP
8. Ramesh, Shri CM.	BJP
9. Reddy, Shri V. Vijayasai	YSRCP
10. Vemireddy, Shri Prabhakar Reddy	YSRCP
11. Venkatesh, Shri T.G.	BJP
ARUNACHAL PRADESH (1)	
12. Rebia, Shri Nabam	BJP
ASSAM (7)	
13. Baishya, Shri Birendra Prasad	AGP
14. Bhuyan, Shri Ajit Kumar	IND
15. Bora, Shri Ripun	INC
16. Kalita, Shri Bhubaneswar	BJP
1 7. Narah, Shrimati Ranee	INC
18. Tasa, Shri Kamakhya Prasad	BJP
19. Vacant	
BIHAR (16)	
20. Bharti, Shrimati Misha	RJD
21. Dubey, Shri Satish Chandra	BJP
22. Gupta, Shri Prem Chand	RJD
23. Harivansh, Shri	JD(U)
24. Jha, Prof. Manoj Kumar	RJD
25. Karim, Shri Ahmad Ashfaque	RJD
26. Prasad, Dr. Mahendra	JD(U)
27. Modi, Shri Sushil	BJP
28. Singh, Shri A.D.	RJD
29. Singh, Shri Akhilesh Prasad	INC
30. Singh, Shri Bashistha Narain	JD(U)
31. Singh, Shri Gopal Narayan	BJP
32. Singh, Shri Ram Chandra Prasad	JD(U)

33. Thakur, Shri Ram Nath	JD(U)
34. Thakur, Shri Vivek	BJP
35. Vacant	
CHHATTISGARH (5)	
36. Netam, Shrimati Phulo Devi	INC
37. Netam, Shri Ram Vichar	BJP
38. Pandey, Ms. Saroj	BJP
39. Tulsi, Shri K.T.S.	INC
40. Verma, Shrimati Chhaya	INC
GOA (1)	
41. Tendulkar, Shri Vinay Dinu	BJP
GUJARAT (11)	
42. Bara, Shrimati Rami laben	BJP
43. Gohil, Shri Shaktisinh	INC
44. Amin, Shri Narhari	BJP
45. Jaishankar, Shri S.	BJP
46. Lokhandwala, Shri Jugalsinh Mathurji	BJP
47. Mandaviya, Shri Mansukh	BJP
48. Rathwa, Shri Naranbhai J.	INC
49. Rupala, Shri Parshottam	BJP
50. Yajnik, Dr. Amee	INC
51. Vacant	
52. Vacant	
HARYANA (5)	
53. Gautam, Shri Dushyant	BJP
54. Jangra, Shri Ram Chander	BJP
55. Singh, Shri Deepender	INC
56. Chandra, Dr. Subhash	IND.
57. Vats (Retd.), Lt. Gen. (Dr.) D.P.	BJP
HIMACHAL PRADESH (3)	
58. Anand Sharma, Shri	INC
59. Goswami, Shrimati Indu Bala	BJP
60. Nadda, Shri Jagat Prakash	BJP
JHARKHAND (6)	

61. Naqvi, Shri Mukhtar Abbas	BJP
62. Oraon, Shri Samir	BJP
63. Poddar, Shri Mahesh	BJP
64. Prakash, Shri Deepak	BJP
65. Sahu, Shri Dhiraj Prasad	INC
66. Soren, Shri Shibu	JMM
KARNATAKA (12)	
67. Chandrasekhar, Shri Rajeev	BJP
68. Chandrashekhar, Shri G.C.	INC
69. Devegowda, Shri H.D.	JD(S)
70. Fernandes, Shri Oscar	INC
71. Koragappa, Shri Narayana	BJP
72. Hanumanthaiah, Dr. L.	INC
73. Hussain, Shri Syed Nasir	INC
74. Kadadi, Shri Iranna	BJP
75. Kharge, Shri Mallikarjun	INC
76. Nirmala Sitharaman, Shrimati	BJP
77. Ramamurthy, Shri K.C.	BJP
78. Ramesh, Shri Jairam	IN
KERALA (9)	
79. Wahab, Shri Abdul	IUML
80. Antony, Shri A.K.	INC
81. Kareem, Shri Elamaram	CPI(M)
82. Mani, Shri Jose K.	KC(M)
83. Ragesh, Shri K.K.	CPI(M)
84. Ravi, Shri Vayalar	INC
85. Shreyams Kumar, Shri M.V.	LJD
86. Somaprasad, Shri K.	CPI(M)
87. Viswam, Shri Binoy	CPI
MADHYA PRADESH (11)	
88. Akbar, Shri M.J.	BJP
89. Gehlot, Shri Thaawar Chand	BJP
90. Patel, Shri Rajmani	INC
91. Pradhan, Shri Dharmendra	BJP

92. Scindia, Shri Jyotiraditya M.	BJP
93. Singh, Shri Ajay Pratap	BJP
94. Singh, Shri Digvijaya	INC
95. Solanki, Dr. Sumer Singh	BJP
96. Soni, Shri Kailash	BJP
97. Tankha, Shri Vivek K.	INC
98. Uikey, Shrimati Sampatiya	BJP
MAHARASHTRA (19)	
99. Athawale, Shri Ramdas	RPI
100. Bhonsle, Shri Chh. Udayanraje	BJP
101. Chaturvedi, Smt. Priyanka	SS
102. Chavan, Smt. Vandana	NCP
103. Chidambaram, Shri P.	INC
104. Desai, Shri Anil	SS
105. Coyal, Shri Piyush	BJP
106. Javadekar, Shri Prakash	BJP
107. Karad, Dr. Bhagwat	BJP
108. Ketkar, Shri Kumar	INC
109. Khan, Dr. Fauzia	NCP
110. Mahatme, Dr. Vikas	BJP
111. Muraleedharan, Shri V.	BJP
112. Patel, Shri Praful	NCP
113. Pawar, Shri Sharad	NCP
114. Rane, Shri Narayan	BJP
115. Raut, Shri Sanjay	SS
116. Sahasrabuddhe, Dr. Vinay P.	BJP
117. Satav, Shri Rajeev	INC
MANIPUR (1)	
118. Leishemba, Shri Maharaja Sanajaoba	BJP
MEGHALAYA (1)	
119. Kharlukhi, Dr. Wanweiroy	NPP
MIZORAM (1)	
120. Vanlalvena, Shri K.	MNF
NAGALAND (1)	

121. Kenye, Shri K.G.	NPF
NATIONAL CAPITAL TERRITORY OF DELHI (3)	
122. Gupta, Shri Narain Dass	AAP
123. Gupta, Shri Sushil Kumar	AAP
124. Singh, Shri Sanjay	AAP
ODISHA (10)	
125. Acharya, Shri Prasanna	BJD
126. Khan, Shri Muzibulla	BJD
127. Kumar, Shri Sujeet	BJD
128. Mohanta, Smt. Mamata	BJD
129. Nanda, Shri Prashanta	BJD
130. Nekkanti, Shri Bhaskar Rao	BJD
131. Patnaik, Dr. Amar	BJD
132. Patra, Dr. Sasmit	BJD
133. Singh, Shri Subhash Chandra	BJD
134. Vaishnaw, Shri Ashwini	BJP
PUDUCHERRY (1)	
135. Gokulakrishnan, Shri N.	AIADMK
PUNJAB (7)	
136. Bajwa, Shri Partap Singh	INC
137. Bhunder, Sardar Balwinder Singh	SAD
138. Dhindsa, Sardar Sukhdev Singh	SAD
139. Dullo, Shri Shamsher Singh	INC
140. Gujral, Shri Naresh	SAD
141. Malik, Shri Shwait	BJP
142. Soni, Shrimati Ambika	INC
RAJASTHAN (10)	
143. Alphons, Shri K.J.	BJP
144. Dangi, Shri Neeraj	INC
145. Dungarpur, Shri Harshvardhan Singh	BJP
146. Gehlot, Shri Rajendra	BJP
147. Mathur, Shri Om Prakash	BJP
148. Meena, Dr. Kirodi Lal	BJP

149. Singh, Dr. Manmohan INC
150. Venugopal, Shri K.C. INC
151. Verma, Shri Ramkumar BJP
152. Yadav, Shri Bhupender BJP

SIKKIM (1)

153. Lachungpa, Shri Hishey SDF

TAMIL NADU (18)

154. Balasubramoniyan, Shri S.R AIADMK
155. Bharathi, Shri RS. DMK
156. Chandrasegharan, Shri N. AIADMK
157. Elango, Shri N.R DMK
158. Elangovan, Shri T.K.S. DMK
159. Mohammedjan, Shri A. AIADMK
160. Munusamy, Shri K.P. AIADMK
161. Navaneethakrishnan, Shri A. AIADMK
162. Ramadoss, Dr. Anbumani PMK
163. Selvarasu, Shri Anthiyur P. DMK
164. Shanmugam, Shri M. DMK
165. Siva, Shri Tiruchi DMK
166. Thamidurai, Dr. M. AIADMK
167. Vaiko, Shri MDMK
168. Vaithilingam, Shri R AIADMK
169. Vasan, Shri G.K. TMC(M)
170. Vijayakumar, Shri A. AIADMK
171. Wilson, Shri P. DMK

TELANGANA (7)

172. Banda, Dr. Prakash TRS
173. Joginipally, Shri Santosh Kumar TRS
174. Rao, Dr. K. Keshava TRS
175. Rao, Shri V. Lakshmikantha TRS
176. Reddy, Shri K.R. Suresh TRS
177. Srinivas, Shri Dharmapuri TRS
178. Yadav, Shri B. Lingaiah TRS

TRIPURA (1)

179. Baidya, Smt. Jharna Das	CPI(M)
UTTAR PRADESH (31)	
180. Agrawal, Dr. Anil	BJP
181. Ashok Siddharth, Shri	BSP
182. Bachchan, Shrimati Jaya	SP
183. Bajpai, Dr. Ashok	BJP
184. Jain, Dr. Anil	BJP
185. Kardam, Shrimati Kanta	BJP
186. Brij Lal	BJP
187. Islam, Shri Syed Zafar	BJP
188. Misra, Shri Satish Chandra	BSP
189. Nagar, Shri Surendra Singh	BJP
190. Nishad, Shri Jaiprakash	BJP
191. Nishad, Shri Vishambhar Prasad	SP
192. Ceeta alias Chandraprabha, Smt.	BJP
193. Puri, Shri Hardeep Singh	BJP
194. Ramji, Shri	BJP
195. Rajbhar, Shri Sakaldeep	BJP
196. Rao, Shri G. V. L. Narasimha	BJP
197. Seth, Shri Sanjay	BJP
198. Shekhar, Shri Neeraj	BJP
199. Shukla, Shri Shiv Pratap	BJP
200. Sibal, Shri Kapil	INC
201. Singh, Shri Arun	BJP
202. Singh, Shri Rewati Raman	SP
203. Dubey, Shri Hardwar	BJP
204. Tomar, Shri Vijay Pal Singh	BJP
205. Trivedi, Dr. Sudhanshu	BJP
206. Verma, Shri B. L.	BJP
207. Dwivedi, Smt. Seema	BJP
208. Yadav, Shri Harnath Singh	BJP
209. Yadav, Prof. Ram Gopal	SP
210. Yadav, Ch. Sukhram Singh	SP
UTTARAKHAND (3)	

211. Bansal, Shri Naresh	BJP
212. Baluni, Shri Anil	BJP
213. Tamta, Shri Pradeep	INC
WEST BENGAL (16)	
214. Bakshi, Shri Subrata	AITC
215. Bhattacharya, Shri P.	INC
216. Ranjan, Shri Bikash	CPI(M)
217. Bhunia, Shri Manas Ranjan	AITC
218. Biswas, Shri Abir Ranjan	AITC
219. Chakraborty, Shri Subhasish	AITC
220. Chhetri, Shrimati Shanta	AITC
221. Ghosh, Shrimati Arpita	AITC
222. Haque, Shri Md. Nadimul	AITC
223. Noor, Shrimati Mausam	AITC
224. O' Brien, Shri Derek	AITC
225. Ray, Shri Sukhendu Sekhar	AITC
226. Sen, Ms. Dola	AITC
227. Sen, Dr. Santanu	AITC
228. Singhvi, Dr. Abhishek Manu	INC
229. Trivedi, Shri Dinesh	AITC
UNION TERRITORIES	
JAMMU AND KASHMIR (4)	
226. Azad, Shri Ghulam Nabi	INC
227. Fayaz, Mir Mohammad	J&K PDP
228. Laway, Shri Nazir Ahmed	J&K PDP
229. Manhas, Shri Shamsher Singh	BJP
NOMINATED - 12	
230. Chhatrapati, Shri Sambhaji	
231. Dasgupta, Shri Swapan	
232. Ganguly, Shrimati Roopa	
233. Gogoi, Shri Ranjan	
234. Jadhav, Dr. Narendra	
235. Kom, Shrimati M.C. Mary	
236. Mansingh, Dr. Sonal	

237. Mohapatra, Dr. Raghunath
238. Shakal, Shri Ram
239. Sinha, Shri Rakesh
240. Gopi, Shri Suresh
241. Swamy, Dr. Subramanian

LOK SAB HA (Statewise List as on December 15, 2020)

Speaker : Shri Om Birla

S.No.	State/Constituency	Name of the Member	Party/ Group
ANDHRA PRADESH (25)			
1.	Vizianagaram	Bellana, Shri Chandra Sekhar	YSRCP
2.	Rajahmundry	Margani, Shri Bharat Ram	YSRCP
3.	Amalapuram (SC)	Chinta, Smt. Anuradha	YSRCP
4.	Narasaraopet	Lavu, Shri Sri Krishna Devarayalu	YSRCP
5.	Cuntur	Calla, Shri Jayadev	TDP
6.	Narsapuram	Kanumuru, Shri Raghu Ramakrishna Raju	YSRCP
7.	Vijayawada	Kesineni, Shri Srinivas	TDP
8.	Hindupur	Madhav, Shri Kuruva Gorantla	YSRCP
9.	Araku	Madhavi, Smt. Goddeti	YSRCP
10.	Chittoor	Nallakonda Gari, Shri Reddeppa	YSRCP
11.	Srikakulam	Ram Mohan Naidu, Shri Kinjarapu	TDP
12.	Anantapur	Rangaiah, Shri Talari	YSRCP
13.	Nellore	Reddy, Shri Adala Prabhakara	YSRCP
14.	Ongole	Reddy, Shri Magunta	YSRCP

		Sreenivasulu	
15.	Rajampet	Reddy, Shri Midhun	YSRCP
16.	Nandyal	Reddy, Shri Pocha Brahmananda	YSRCP
17.	Kadapa	Reddy, Shri Y. S. Avinash	YSRCP
18.	Visakhapatnam	Satyanarayana, Shri M. V. V.	YSRCP
19.	Kurnool	Singari, Dr. Sanjeev Kumar	YSRCP
20.	Eluru	Sridhar, Shri Kotagiri	YSRCP
21.	Bapatla (SC)	Suresh, Shri Nandigam	YSRCP
22.	Machilipatnam	Vallabbhaneni, Shri Balashowry	YSRCP
23.	Kakinada	Vanga, Smt. Geetha Viswanath	YSRCP
24.	Anakapalle	Beesetti, Dr. Venkata Satyavathi	YSRCP
25.	Tirupati	VACANT	
ARUNACHAL PRADESH (2)			
26.	Arunachal East	Gao, Shri Tapir	BJP
27.	Arunachal West	Rijiju, Shri Kiren	BJP
ASSAM (14)			
28.	Dhubri	Ajmal, Maulana Badruddin	AIUDF
29.	Lakhimpur	Baruah, Shri Pradan	BJP
30.	Autonomous District	Bey, Shri Horen Sing	BJP
31.	Nawgong	Bordoloi, Shri Pradyut	INC
32.	Tezpur	Das, Shri Pal lab Lochan	BJP
33.	Mangaldoi	Dilip, Shri Saikia	BJP
34.	Kaliabor	Gogoi, Shri Gaurav	INC
35.	Jorhat	Gogoi, Shri Topon Kumar	BJP

36.	Barpeta	Khaleque, Shri Abdul	INC
37.	Karimganj (SC)	Mallah, Shri Kripanath	BJP
38.	Gauhati	Oja, Smt. Queen	BJP
39.	Silchar	Roy, Dr. Rajdeep	BJP
40.	Kokrajhar (ST)	Sarania, Shri Naba (Hira) Kumar	IND.
41.	Dibrugarh	Teli, Shri Rameswar	BJP

BIHAR (40)

42.	Buxar	Choubey, Shri Ashwini Kumar	BJP
43.	Sheohar	Devi, Smt. Rama	BJP
44.	Vaishali	Devi, Smt. Veena	LJSP
45.	Katihar	Goswami, Shri Dulal Chandra	JD(U)
46.	Paschim Champaran	Jaiswal, Dr. Sanjay	BJP
47.	Kishanganj	Jawed, Dr. Mohammad	INC
48.	Khagaria	Kaiser, Choudhary Mehboob Ali	LJSP
49.	Supaul	Kamait, Shri Dileshwar	JD(U)
50.	Nalanda	Kumar, Shri Kaushalendra	JD(U)
51.	Purnia	Kumar, Shri Santosh	JD(U)
52.	Gaya (SC)	Kumar, Shri Vijay	JD(U)
53.	Valmiki Nagar	Kumar, Shri Sunil	JD(U)
54.	Bhagalpur	Mandal, Shri Ajay Kumar	JD(U)
55.	Jhanjharpur	Mandal, Shri Rampreet	JD(U)
56.	Muzaffarpur	Nishad, Shri Ajay	BJP
57.	Hajipur	Paras, Shri Pashupati Kumar	LJSP
58.	Sasaram (SC)	Paswan, Shri Chhedi	BJP
59.	Jamui (SC)	Paswan, Shri Chirag	LJSP
60.	Jahanabad	Prasad, Shri Chandeshwar	JD(U)
61.	Patna Sahib	Prasad, Shri Ravi Shankar	BJP
62.	Samastipur	Raj, Shri Prince	LJSP
63.	Ujiarpur	Rai, Shri Nityanand	BJP
64.	Saran	Rudy, Shri Rajiv Pratap	BJP

65.	Darbhanga	Thakur, Shri Gopal Jee	BJP
66.	Maharajganj	Sigriwal, Shri Janardan Singh	BJP
67.	Nawada	Singh, Shri Chandan	LJSP
68.	Begusarai	Singh, Shri Giriraj	BJP
69.	Siwan	Singh, Smt. Kavita	JD(U)
70.	Karakat	Singh, Shri Mahabali	JD(U)
71.	Araria	Singh, Shri Pradeep Kumar	BJP
72.	Purvi Champaran	Singh, Shri Radha Mohan	BJP
73.	Arrah	Singh, Shri Raj Kumar	BJP
74.	Munger	Singh, Shri Rajiv Ranjan (Lalan)	JD(U)
75.	Aurangabad	Singh, Shri Sushil Kumar	BJP
76.	Gopalganj (SC)	Suman, Dr. Alok Kumar	JD(U)
77.	Sitamarhi	Pintu, Shri Sunil Kumar	JD(U)
78.	Madhubani	Yadav, Shri Ashok Kumar	BJP
79.	Madhepura	Yadav, Shri Dinesh Chandra	JD(U)
80.	Banka	Yadav, Shri Giridhari	JD(U)
81.	Pataliputra	Yadav, Shri Ram Kripal	BJP
CHHATTISGARH (11)			
82.	Janjgir-Champa(SC)	Ajgalley, Shri Guharam	BJP
83.	Durg	Baghel, Shri Vijay	BJP
84.	Bastar (ST)	Baij, Shri Deepak	INC
85.	Korba	Mahant, Smt. Jyotsna Charandas	INC
86.	Kanker (ST)	Mandavi, Shri Mohan	BJP
87.	Rajnandgaon	Pandey, Shri Santosh	BJP
88.	Mahasamund	Sahu, Shri Chunni Lal	BJP
89.	Raigarh (ST)	Sai, Smt. Gomati	BJP
90.	Bilaspur	Sao, Shri Arun	BJP
91.	Surguja (ST)	Saruta, Smt. Renuka Singh	BJP
92.	Raipur	Soni, Shri Sunil Kumar	BJP

GOA (2)

93.	North Goa	Naik, Shri Shripad Yesso	BJP
94.	South Goa	Sardinha, Shri Francisco Cosme	INC

GUJARAT (26)

95.	Dahod (ST)	Bhabhor, Shri Jaswantsinh Sumanbhai	BJP
96.	Vadodara	Bhatt, Smt. Ranjanben Dhananjay	BJP
97.	Kheda	Chauhan, Shri Devusinh Jesingbhai	BJP
98.	Kachchh (SC)	Chavda, Shri Vinod	BJP
99.	Junagadh	Chudasama, Shri Rajeshbhai Naranbha	BJP
100.	Patan	Dabhi, Shri Bharatsinhji Shankarji	BJP
101.	Porbandar	Dhaduk, Shri Rameshbhai Lavjibhai	BJP
102.	Surat	Jardosh, Smt. Darshana Vikram	BJP
103.	Amreli	Kachhadiya, Shri Naranbhai Bhikhabhai	BJP
104.	Rajkot	Kundariya, Shri Mohanbhai Kalyanji	BJP
105.	Jamnagar	Maadam, Smt. Poonamben Hematbhai	BJP
106.	Surendranagar	Munjpara, Dr. Mahendrabhai Kalubhai	BJP
107.	Ahmedabad East	Patel, Shri Hasmukhbhai Somabhai	BJP
108.	Valsad (ST)	Patel, Dr. K.C.	BJP
109.	Anand	Patel, Shri Mitesh Rameshbhai	BJP
110.	Banaskantha	Patel, Shri Parbatbhai Savabhai	BJP

111.	Mahesana	Patel, Smt. Shardaben Anil Kumar	BJP
112.	Navsari	Patil, Shri C.R.	BJP
113.	Sabarkantha	Rathod, Shri Dipsinh Shankarsinh	BJP
114.	Panchmahal	Rathod, Shri Ratansinh Magansinh	BJP
115.	Chhota Udaipur (ST)	Rathva, Smt. Gitaben Vajesingbhai	BJP
116.	Gandhinagar	Shah, Shri Amit Anil Chandra	BJP
117.	Bhavnagar	Shiyal, Dr. Bharatiben Dhirubhai	BJP
118.	Ahmedabad West (SQ	Solanki, Dr. (Prof.) Kirit Premjibhai	BJP
119.	Bharuch	Vasava, Shri Mansukhbhai Dhanjibhai	BJP
120.	Bardoli (ST)	Vasava, Shri Prabhubhai Nagarbhai	BJP
HARYANA (10)			
121.	Karnal	Bhatia, Shri Sanjay	BJP
122.	Bhiwani-Mahendragarh	Singh, Shri Dharambir	BJP
123.	Sirsa (SC)	Duggal, Smt. Sunita	BJP
124.	Faridabad	Gurjar, Shri Krishan Pal	BJP
125.	Ambala (SC)	Kataria, Shri Rattan Lal	BJP
126.	Sonipat	Kaushik, Shri Ramesh Chander	BJP
127.	Gurgaon	Rao, Shri Inderjit Singh	BJP
128.	Rohtak	Sharma, Dr. Arvind Kumar	BJP
129.	Hisar	Singh, Shri Brijendra	BJP
130.	Kurukshetra	Singh, Shri Nayab	BJP
HIMACHAL PRADESH (4)			

131.	Kangra	Kapoor, Shri Kishan	BJP
132.	Shimla (SC)	Kashyap, Shri Suresh Kumar	BJP
133.	Mandi	Sharma, Shri Ram Swaroop	BJP
134.	Hamirpur	Thakur, Shri Anurag Singh	BJP
JHARKHAND (14)			
135.	Lohardaga (ST)	Bhagat, Shri Sudarshan	BJP
136.	Giridih	Choudhary, Shri Chandra Prakash	AJSU
137.	Godda	Dubey, Dr. Nishikant	BJP
138.	Rajmahal (ST)	Hansdak, Shri Vijay Kumar	JMM
139.	Singhbhum (ST)	Kora, Smt. Geeta	INC
140.	Jamshedpur	Mahato, Shri Bidyut Baran	BJP
141.	Kodarma	Devi, Smt. Annpurna	BJP
142.	Khunti (ST)	Munda, Shri Arjun	BJP
143.	Palamu (SC)	Ram, Shri Vishnu Dayal	BJP
144.	Ranchi	Seth, Shri Sanjay	BJP
145.	Dhanbad	Singh, Shri Pashupati Nath	BJP
146.	Chatra	Singh, Shri Sunil Kumar	BJP
147.	Hazaribagh	Sinha, Shri Jayant	BJP
148.	Dumka (ST)	Soren, Shri Sunil	BJP
KARNATAKA (28)			
149.	Chitradurga (SC)	Abbaiah, Shri Narayana Swamy	BJP
150.	Mandya	Ambareesh, Smt. Sumalatha	IND.
151.	Belgaum	Vacant	

152.	Chikkballapur	Gowda, Shri Bache B.N.	BJP
153.	Tumkur	Basavaraj, Shri Gangasandra Siddappa	BJP
154.	Bagalkot	Gaddigoudar, Shri Chandanagouda	BJP
155.	Bangalore North	Gowda, Shri D.V Sadananda	BJP
156.	Uttara Kannada	Hegde, Shri Anantkumar	BJP
157.	Gulbarga (SC)	Jadhav, Dr. Umesh G.	BJP
158.	Bijapur (SC)	Jigajinagi, Shri Ramesh Chandappa	BJP
159.	Chikkodi	Jolle, Shri Annasaheb Shankar	BJP
160.	Dharwad	Joshi, Shri Pralhad Venkatesh	BJP
161.	Koppal	Karadi, Shri Sanganna Amarappa	BJP
162.	Udupi Chikmagalur	Karandlaje, Km. Shobha	BJP
163.	Dakshina Kannada	Kateel, Shri Nalin Kumar	BJP
164.	Bidar	Khuba, Shri Bhagwanth	BJP
165.	Bangalore Central	Mohan, Shri PC.	BJP
166.	Kolar (SC)	Muniswamy, Shri S.	BJP
167.	Raichur (ST)	Naik, Shri Raja Amareshwara	BJP
168.	Chamrajanagar (SC)	Prasad, Shri V. Srinivas	BJP
169.	Shimoga	Raghavendra, Shri B.Y.	BJP
170.	Hassan	Revanna, Shri Prajwal	JD (S)

171.	Davanagere	Siddeshwara, Shri Gowdar Mallikarjunappa	BJP
172.	Mysore	Simha, Shri Prathap	BJP
173.	Bangalore Rural	Suresh, Shri Doddaalahalli Kempegowda	INC
174.	Bangalore South	Surya, Shri L.S. Tejasvi	BJP
175.	Haveri	Udasi, Shri Shivkumar Chanabasappa	BJP
176.	Bellary (ST)	Y, Shri Devendrappa	BJP
KERALA (20)			
177.	Pathanamthitta	Antony, Shri Anto	INC
178.	Alappuzha	Ariff, Adv. Abdul Majeed	CPI(M)
179.	Ponnani	Basheer, Shri E. T. Mohammed	IUML
180.	Chalakudy	Benny, Shri Behanan	INC
181.	Kottayam	Chazhikadan, Shri Thomas	KC(M)
182.	Ernakulam	Eden, Shri Hibi	INC
183.	Wayanad	Gandhi, Shri Rahul	INC
184.	Alathur (SC)	Haridas, Ms. Ramya	INC
185.	Mavelikkara (SC)	Kodikunnil, Shri Suresh	INC
186.	Idukki	Kuriakose, Adv. Dean	INC
187.	Vadakara	Muraleedharan, Shri K.	INC
188.	Malappuram	Kunhalikutty, Shri P.K.	IUML
189.	Attingal	Prakash, Adv. Adoor	INC
190.	Thrissur	Prathapan, Shri T.N.	INC
191.	Kollam	Premachandran, Shri	RSP

		N.K.	
192.	Kozhikode	Raghavan, Shri M.K.	INC
193.	Kannur	Sudhakaran, Shri Kumbakudi	INC
194.	Thiruvananthapuram	Tharoor, Dr. Shashi	INC
195.	Kasaragod	Unnithan, Shri Rajmohan	INC
196.	Palakkad	Sreekandan, Shri V.K.	INC
MADHYA PRADESH (29)			
197.	Vidisha	Bhargava, Shri Ramakant	BJP
198.	Balaghat	Bisen, Dr. Dhal Singh	BJP
199.	Khandwa	Chauhan, Shri Nand Kumar Singh	BJP
200.	Ratlam (ST)	Damor, Shri Guman Singh	BJP
201.	Dhar (ST)	Darbar, Shri Chhatar Singh	BJP
202.	Ujjain (SC)	Firojiya, Shri Anil	BJP
203.	Mandsour	Gupta, Shri Sudheer	BJP
204.	Mandla (ST)	Kulaste, Shri Faggan Singh	BJP
205.	Tikamgarh (SC)	Kumar, Dr. Virendra	BJP
206.	Indore	Lalwani, Shri Shankar	BJP
207.	Rewa	Mishra, Shri Janardan	BJP
208.	Rajgarh	Nagar, Shri Rodmal	BJP
209.	Chhindwara	Nath, Shri Nakul K.	INC
210.	Khargone (ST)	Patel, Shri Gajendra Singh	BJP
211.	Damoh	Patel, Shri Prahlad Singh	BJP
212.	Sidhi	Pathak, Smt. Riti	BJP
213.	Bhind (SC)	Ray, Smt. Sandhya	BJP

214.	Khajuraho	Sharma, Shri Vishnu Dutt	BJP
215.	Gwalior	Shejwalkar, Shri Vivek Narayan	BJP
216.	Satna	Singh, Shri Ganesh	BJP
217.	Shahdol (ST)	Singh, Smt. Himadri	BJP
218.	Sagar	Singh, Shri Rajbahadur	BJP
219.	Jabalpur	Singh, Shri Rakesh	BJP
220.	Hoshangabad	Singh, Shri Uday Pratap	BJP
221.	Dewas (SC)	Solanky, Shri Mahendra Singh	BJP
222.	Bhopal	Thakur, Sadhvi Pragya Singh	BJP
223.	Morena	Tomar, Shri Narendra Singh	BJP
224.	Betul (ST)	Uikey, Shri Durga Das	BJP
225.	Guna	Yadav, Dr. Krishna Pal Singh	BJP
MAHARASHTRA (48)			
226.	Pune	Bapat, Shri Girish Bhalchandra	BJP
227.	Maval	Barne, Shri Shrirang Appa	SS
228.	Dhule	Bhamre, Dr. Subhash Ramrao	BJP
229.	Yavatmal-Washim	Gawali (Patil), Ms. Bhavana	SS
230.	Nanded	Chikhalikar, Shri Prataprao Govindrao Patil	BJP
231.	Jalna	Danve, Shri Raosaheb	BJP

		Patil	
232.	Chandrapur	Dhanorkar, Shri Balubhau (Alias Suresh Narayan)	INC
233.	Akola	Dhotre, Shri Sanjay Shamrao	BJP
234.	Nagpur	Gadkari, Shri Nitin Jairam	BJP
235.	Nandurbar (ST)	Gavit, Dr. Heena Vijaykumar	BJP
236.	Palghar (ST)	Gavit, Shri Rajendra Dhedya	SS
237.	Nashik	Godse, Shri Hemant Tukaram	SS
238.	Buldhana	Jadhav, Shri Prataprao	SS
239.	Parbhani	Jadhav, Shri Sanjay Haribhau	SS
240.	Raver	Khadse, Smt. Raksha Nikhil	BJP
241.	Mumbai-North-West	Kirtikar, Shri Gajanan Chandrakant	SS
242.	Shirur	Kolhe, Dr. Amol Ramsing	NCP
243.	Mumbai-North-East	Kotak, Shri Manoj Kishorbhai	BJP
244.	Shirdi (SC)	Lokhande, Shri Sadashiv Kisan	SS
245.	Solapur (SC)	Mahaswamiji, Dr. Jaisiddeshwar Shivacharya	BJP
246.	Kolhapur	Mandlik, Shri Sanjay Sadashivrao	SS
247.	Bhandara-Condiya	Mendhe, Shri Sunil Baburao	BJP
248.	Beed	Munde, Dr. Pritam	BJP

		Gopinath Rao	
249.	Madha	Naik-Nimbalkar, Shri Ranjeetsinha Hindurao	BJP
250.	Gadchiroli-Chimur (ST)	Nete, Shri Ashok Mahadeorao	BJP
251.	Hingoli	Patil, Shri Hemant Shriram	SS
252.	Bhiwandi	Patil, Shri Kapil Moreshwar	BJP
253.	Sangli	Patil, Shri Sanjay (Kaka) Ramchandra	BJP
254.	Satara	Patil, Shri Shriniwas Dadasaheb	NCP
255.	Jalgaon	Patil, Shri Unmesh Bhaiyyasaheb	BJP
256.	Dindori	Pawar, Dr. Bharti Pravin	BJP
257.	Osmanabad	Rajenimbalkar, Shri Omprakash Bhupalsinh alias Pawan	SS
258.	Amravati (SC)	Rana, Smt Navneet Ravi	IND.
259.	Ratnagiri-Sindhudurg	Raut, Shri Vinayak Bhaurao	SS
260.	Mumbai-South	Sawant, Shri Arvind Ganpat	SS
261.	Mumbai-North	Shetty, Shri Gopal Chinayya	BJP
262.	Kalyan	Shinde, Dr. Shrikant Eknath	SS
263.	Latur (SC)	Shrangare, Shri Sudhakar Tukaram	BJP
264.	Hatkanangle	Mane, Shri Dhairyasheel	SS

265.	Mumbai South-Central	Sambhajirao Shewale, Shri Rahul Ramesh	SS
266.	Aurangabad	Jaleel, Shri Syed Imtiaz	AIMIM
267.	Baramati	Sule, Smt. Supriya Sadanand	NCP
268.	Wardha	Tadas, Shri Ramdas Chandrabhanji	BJP
269.	Raigad	Tatkare, Shri Sunil Dattatray	NCP
270.	Ramtek (SC)	Tumane, Shri Krupal Balaji	SS
271.	Mumbai-North-Central	Vajendla Rao, Smt. Poonam (Mahajan)	BJP
272.	Thane	Vichare, Shri Rajan Baburao	SS
273.	Ahmednagar	Vikhepatil, Dr. Sujay Radhakrishna	BJP
MANIPUR (2)			
274.	Outer Manipur (ST)	Pfoze, Dr. Lorho S.	NPF
275.	Inner Manipur	Rajkumar, Dr. Ranjan Singh	BJP
MEGHALAYA (2)			
276.	ShiIIong (ST)	Pala, Shri Vincent H.	INC
277.	Tura (ST)	Sangma, Kum. Agatha K.	NPF
MIZORAM (1)			
278.	Mizoram (ST)	Lalrosanga, Shri C.	MNF
NAG ALAND (1)			
279.	Nagaland	Yepthomi, Shri Tokheho	NDPP
ODISHA (21)			
280.	Aska	Bisoyi, Smt. Pramila	BJD
281.	Sambalpur	Deb, Shri Nitesh	BJP

		Ganga	
282.	Cuttack	Mahtab, Shri Bhartruhari	BJD
283.	Nabarangpur (ST)	Majhi, Shri Ramesh Chandra	BJD
284.	Jagatsinghpur (SC)	Mallick, (Dr.) Smt. Rajashree	BJD
285.	Bhadrak (SC)	Mandal, Smt. Manjulata	BJD
286.	Puri	Misra, Shri Pinaki	BJD
287.	Kendrapara	Mohanty, Shri Anubhav	BJD
288.	Keonjhar (ST)	Murmu, Ms. Chandrani	BJD
289.	Sundargarh (ST)	Oram, Shri Jual	BJP
290.	Kalahandi	Panda, Shri Basanta Kumar	BJP
291.	Balasore	Sarangi, Shri Pratap Chandra	BJP
292.	Bargarh	Pujari, Shri Suresh Kumar	BJP
293.	Dhenkanal	Sahoo, Shri Mahesh	BJD
294.	Berhampur	Sahu, Shri Chandra Sekhar	BJD
295.	Kandhamal	Samanta, Shri Achyutananda	BJD
296.	Bhubaneswar	Sarangi, Smt. Aparajita	BJP
297.	Jajpur (SC)	Sethi, Smt. Sarmistha	BJD
298.	Bolangir	Singh Deo, Smt. Sangeeta Kumari	BJP
299.	Mayurbhanj (ST)	Tudu, Shri Bishweswar	BJP
300.	Koraput (ST)	Ulaka, Shri Saptagiri Sankar	INC

PUNJAB (13)

301.	Amritsar	Aujla, Shri Gurjeet Singh	INC
302.	Bathinda	Badal, Smt. Harsimrat Kaur	SAD
303.	Ferozpur	Badal, Shri Sukhbir Singh	SAD
304.	Jalandhar (SC)	Chaudhary, Shri Santokh Singh	INC
305.	Gurdaspur	Deol, Shri Sunny	BJP
306.	Khadoor Sahib	Gill, Shri Jasbir Singh	INC
307.	Patiala	Kaur, Smt. Preneet	INC
308.	Sangrur	Mann, Shri Bhagwant	AAP
309.	Hoshiarpur (SC)	Parkash, Shri Som	BJP
310.	Faridkot (SC)	Sadique, Mohammad	INC
311.	Fatehgarh Sahib (SC)	Singh, Dr. Amar	INC
312.	Ludhiana	Singh, Shri Ravneet	INC
313.	Anandpur Sahib	Tewari, Shri Manish	INC

RAJASTHAN (25)

314.	Bhilwara	Baheria, Shri Subhash Chandra	BJP
315.	Nagaur	Beniwal, Shri Hanuman	RLP
316.	Ajmer	Chaudhary, Shri Bhagirath	BJP
317.	Kota	Birla, Shri Om	BJP
318.	Jaipur	Bohra, Shri Ramcharan	BJP
319.	Pali	Chaudhary, Shri P.P.	BJP
320.	Ganganagar (SC)	Chauhan, Shri Nihal Chand	BJP
321.	Barmer	Choudhary, Shri Kailash	BJP
322.	Tonk-Sawai	Jaunapuria, Shri	BJP

	Madhopur	Sukhbir Singh	
323.	Chittorgarh	Joshi, Shri Chandra Prakash	BJP
324.	Churu	Kaswan, Shri Rahul	BJP
325.	Banswara (ST)	Katara, Shri Kanakmal	BJP
326.	Bharatpur (SC)	Koli, Smt. Ranjeeta	BJP
327.	Jhunjhunu	Kumar, Shri Narendra	BJP
328.	Rajsamand	Kumari, Ms. Diya	BJP
329.	Udaipur (ST)	Meena, Shri Arjunlal	BJP
330.	Dausa (ST)	Meena, Smt. Jaskaur	BJP
331.	Bikaner (SC)	Meghwal, Shri Arjun Ram	BJP
332.	Alwar	Nath, Shri Balak	BJP
333.	Jalore	Patel, Shri Devji Mansingram	BJP
334.	Karauli-Dholpur (SC)	Rajoria, Dr. Manoj	BJP
335.	Jaipur Rural	Rathore, Col. Rajyavardhan Singh	BJP
336.	Sikar	Saraswati, Shri Sumedhanand	BJP
337.	Jodhpur	Shekhawat, Shri Gajendra Singh	BJP
338.	Jhalawar-Baran	Singh, Shri Dushyant	BJP
SIKKIM (1)			
339.	Sikkim	Subba, Shri Indra Hang	SKM
TAMIL NADU (39)			
340.	Vellore	Anand, Shri D. M. Kathir	DMK
341.	Tiruvannamalai	Annadurai, Shri C.N.	DMK
342.	Sriperumbudur	Baalu, Shri Thalikkottai	DMK

343.	Krishnagiri	Rajuthevar Chellakumar, Dr. A.	INC
344.	Sivaganga	Chidambaram, Shri Karti P.	INC
345.	Namakkal	Chinraj, Shri A.K.P.	DMK
346.	Dharmapuri	Dr. DNV Senthilkumar S.	DMK
347.	Chennai South	Dr. T. Sumathy (a) Thamizhachi	DMK
348.	Erode	Ganeshamurthi, Shri A.	DMK
349.	Tirunelveli	Gnanathiraviam, Shri S.	DMK
350.	Arakkonam	Jagathrakshakan, Shri S.	DMK
351.	Tiruvallur	Jayakumar, Dr. K.	INC
352.	Karur	Jothimani, Ms. S.	INC
353.	Ramanathapuram	Kani, Shri K. Navas	IUML
354.	Chennai North	Kalanidhi, Dr. Veeraswamy	DMK
355.	Thoothukkudi	Karunanidhi, Smt. Kanimozhi	DMK
356.	Tenkasi (SC)	Kumar, Shri Dhanush M.	DMK
357.	Chennai Central	Maran, Thiru Dayanidhi	DMK
358.	Coimbatore	Natarajan, Shri P.R.	CPI(M)
359.	Perambalur	Paarivendhar, Dr. T.R.	DMK
360.	Thanjavur	Palanimanickam, Shri S.S.	DMK
361.	Salem	Parthiban, Shri S.R.	DMK
362.	Kallakurichi	Pon, Shri Gautham Sigamani	DMK
363.	Nilgiris (SC)	Raja, Shri Andimuthu	DMK
364.	Mayiladuthurai	Ramalingam, Shri S.	DMK

365.	Cuddalore	Ramesh, Shri T.R.V.S.	DMK
366.	Theni	Raveendranath Kumar, Shri P.	AIADMK
367.	Viluppuram	Ravikumar, Shri D.	DMK
368.	Kancheepuram	Selvam, Shri Ganesan	DMK
369.	Nagapattinam	Selvaraj, Shri M.	CPI
370.	Pollachi	Sundaram, Shri K. Shanmuga	DMK
371.	Tiruppur	Subbarayan, Shri K.	CPI
372.	Virudhunagar	Tagore B, Shri Manickam	INC
373.	Tiruchirappalli	Thirunavukkarasar, Shri Su	INC
374.	Chidambaram (SC)	Thol, Shri Thirumaa Valavan	VCK
375.	Kanniyakumari	Vacant	
376.	Dindigul	Velusamy, Shri P.	DMK
377.	Madurai	Venkatesan, Shri S.	CPI(M)
378.	Arani	Vishnu Prasad, Dr. M.K.	INC
TELANGANA (17)			
379.	Karimnagar	Bandi, Shri Sanjay Kumar	BJP
380.	Peddapalle(SC)	Borlakunta, Shri Venkatesh Netha	TRS
381.	Nizamabad	Dharmapuri, Shri Arvind	BJP
382.	Secunderabad	Gangapuram, Shri Kishan Reddy	BJP
383.	Mahabubabad (ST)	Maloth, Smt. Kavitha	TRS
384.	Hyderabad	Owaisi, Shri Asaduddin	AIMIM
385.	Warangal (SC)	Pasunoori, Shri Dayakar	TRS

386.	Zahirabad	Patil, Shri Bheemrao Baswanthrao	TRS
387.	Nagarkurnool (SC)	Pothuganti, Shri Ramulu	TRS
388.	Khammam	Rao, Shri Nama Nageswara	TRS
389.	Adilabad (ST)	Rao, Shri Soyam Babu	BJP
390.	Malkajgiri	Reddy, Shri Anumula Revanth	INC
391.	Chevella	Reddy, Dr. Gaddam Ranjith	TRS
392.	Bhongir	Reddy, Shri Komati Reddy Venkat	INC
393.	Medak	Reddy, Shri Kotha Prabhakar	TRS
394.	Mahabubnagar	Reddy, Shri Manne Srinivas	TRS
395.	Nalgonda	Reddy, Shri Uttam Kumar Nalamada	INC
TRIPURA (2)			
396.	Tripura West	Bhoumik, Ms. Pratima	BJP
397.	Tripura East (ST)	Tripura, Shri Rebati	BJP
UTTAR PRADESH (80)			
398.	Meerut	Agrawal, Shri Rajendra	BJP
399.	Ghazipur	Ansari, Shri Afzal	BSP
400.	Lalganj (SC)	Azad, Smt. Sangeeta	BSP
401.	Agra (SC)	Baghel, Prof. S.P. Singh	BJP
402.	Muzaffarnagar	Balyan, Dr. Sanjeev Kumar	BJP
403.	Sambhal	Barq, Shri Shafiqur	SP

		Rahman	
404.	Machhlishahr (SC)	Bholanath (B.P. Saroj), Shri	BJP
405.	Fatehpur Sikri	Chahar, Shri Rajkumar	BJP
406.	Hamirpur	Chandel, Kunwar Pushpendra Singh	BJP
407.	Nagina (SC)	Chandra, Shri Girish	BSP
408.	Kairana	Chaudhary, Shri Pradeep Kumar	BJP
409.	Maharajganj	Chowdhary, Shri Pankaj	BJP
410.	Hathras (SC)	Diler, Shri Rajveer	BJP
411.	Bhadohi	Bind, Dr. Ramesh Chand	BJP
412.	Kushi Nagar	Dubey, Shri Vijay Kumar	BJP
413.	Basti	Dwivedi, Shri Harish	BJP
414.	Pilibhit	Gandhi, Shri Feroze Varun	BJP
415.	Sultanpur	Gandhi, Smt. Maneka Sanjay	BJP
416.	Rae Bareli	Gandhi, Smt. Sonia	INC
417.	Bareilly	Gangwar, Shri Santosh Kumar	BJP
418.	Aligarh	Gautam, Shri Satish Kumar	BJP
419.	Ghaziabad	Singh, General (Dr.), Vijay Kumar (Retd.)	BJP
420.	Pratapgarh	Gupta, Shri Sangamlal Kadedin	BJP
421.	Moradabad	Hasan, Dr. S.T.	SP
422.	Mathura	Hema Malini, Smt.	BJP
423.	Amethi	Irani, Smt. Smriti Zubin	BJP

424.	Hardoi (SC)	Jai Prakash, Shri	BJP
425.	Allahabad	Joshi, Prof. Rita Bahuguna	BJP
426.	Fatehpur	Jyoti, Sadhvi Niranjan	BJP
427.	Aon la	Kashyap, Shri Dharmendra Kumar	BJP
428.	Etawah (SC)	Katheria, Prof. (Dr.) Ram Shankar	BJP
429.	Rampur	Khan, Shri Mohammad Azam	SP
430.	Mohanlalganj (SC)	Kishore, Shri Kaushal	BJP
431.	Amroha	Kunwar, Shri Danish Ali	BSP
432.	Salempur	Kushawaha, Shri Ravindra	BJP
433.	Bahraich (SC)	Lal, Shri Akshaibar	BJP
434.	Robertsganj (SC)	Lal, Shri Pakauri	Apna Dal
435.	Badaun	Maurya, Dr. Sanghamitra	BJP
436.	Kheri	Misra, Shri Ajay (Teni)	BJP
437.	Varanasi	Modi, Shri Narendra Damodardas	BJP
438.	Bijnor	Nagar, Shri Malook	BSP
439.	Sant Kabir Nagar	Nishad, Shri Praveen Kumar	BJP
440.	Kanpur	Pachauri, Shri Satyadev	BJP
441.	Domariyaganj	Pal, Shri Jagdambika	BJP
442.	Chandauli	Pandey, Dr. Mahendra Nath	BJP
443.	Ambedkar Nagar	Pandey, Shri Ritesh	BSP
444.	Bansgaon (SC)	Paswan, Shri Kamlesh	BJP

445.	Mirzapur	Patel, Smt. Anupriya	Apna Dal
446.	Phulpur	Patel, Smt. Keshari Devi	BJP
447.	Banda	Patel, Shri R.K. Singh	BJP
448.	Kannauj	Pathak, Shri Subrata	BJP
449.	Farrukhabad	Rajput, Shri Mukesh	BJP
450.	Shrawasti	Verma, Shri Shiromaniram	BSP
451.	Misrikh (SC)	Rawat, Shri Ashok Kumar	BJP
452.	Barabanki (SC)	Rawat, Shri Upendra Singh	BJP
453.	Saharanpur	Rehman, Shri Haji Fazlur	BSP
454.	Shahjahanpur (SC)	Sagar, Shri Arun Kumar	BJP
455.	Firozabad	Sen, Dr. Jadon Chandra	BJP
456.	Jhansi	Sharma, Shri Anurag	BJP
457.	Gautam Buddha Nagar	Sharma, Dr. Mahesh	BJP
458.	Gorakhpur	Shukla, Shri Ravindra Shyamnarayan alias Ravi Kishan	BJP9
459.	Ghosi	Singh, Shri Atul Kumar	BSP
460.	Bulandshahr (SC)	Singh, Shri Bhola	BJP
461.	Kaiserganj	Singh, Shri Brijbhushan Sharan	BJP
462.	Akbarpur	Singh, Shri Devendra (alias) Bhole Singh	BJP
463.	Gonda	Singh, Shri Kirti Vardhan	BJP
464.	Faizabad	Singh, Shri Lallu	BJP
465.	Lucknow	Singh, Shri Rajnath	BJP

466.	Etah	Singh, Shri Rajveer (Raju Bhaiya)	BJP
467.	Baghpat	Singh, Dr. Satya Pal	BJP
468.	Jaunpur	Yadav, Shri Shyam Singh	BSP
469.	Ballia	Singh, Shri Virendra	BJP
470.	Kaushambi (SC)	Sonkar, Shri Vinod Kumar	BJP
471.	Unnao	Swami Maharaj, Dr. Sakshi Ji	BJP
472.	Deoria	Tripathi, Shri Ramapati Ram	BJP
473.	Jalaun (SC)	Verma, Shri Bhanu Pratap Singh	BJP
474.	Sitapur	Verma, Shri Rajesh	BJP
475.	Dhaurahra	Verma, Smt. Rekha Arun	BJP
476.	Azamgarh	Yadav, Shri Akhilesh	SP
477.	Mainpuri	Yadav, Shri Mulayam Singh	SP
UTTARAKHAND (5)			
478.	Nainital-Udhamsingh Nagar	Bhatt, Shri Ajay	BJP
479.	Hardwar	Nishank, Dr. Ramesh Pokhriyal	BJP
480.	Garhwal	Rawat, Shri Tirath Singh	BJP
481.	Tehri Garhwal	Shah, Smt. Mala Rajya Laxmi	BJP
482.	Almora (SC)	Tamta, Shri Ajay	BJP
WEST BENGAL (42)			
483.	Ghatal	Adhikari, Shri Deepak (Dev)	AITC

484.	Tamluk	Adhikari, Shri Dibyendu	AITC
485.	Kanthi	Adhikari, Shri Sisir Kumar	AITC
486.	Bardhaman-Durgapur	Ahluwalia, Shri S.S.	BJP
487.	Uluberia	Ahmed, Smt. Sajda	AITC
488.	Asansol	Babul Supriyo, Shri	BJP
489.	Kolkata Uttar	Bandyopadhyay, Shri Sudip	AITC
490.	Diamond Harbour	Banerjee, Shri Abhishek	AITC
491.	Serampore	Banerjee, Shri Kalyan	AITC
492.	Howrah	Banerjee, Shri Prasun	AITC
493.	Alipurduar (ST)	Barla, Shri John	BJP
494.	Darjeeling	Bista, Shri Raju	BJP
495.	Jadavpur	Chakraborty, Ms. Mimi	AITC
496.	Hooghly	Chatterjee, Smt. Locket	BJP
497.	Raiganj	Chaudhuri, Ms. Debasree	BJP
498.	Maldaha Dakshin	Choudhury, Shri Abu Hasem Khan	INC
499.	Baharampur	Chowdhury, Shri Adhir Ranjan	INC
500.	Barasat	Dastidar, Dr. (Smt.) Kakoli Ghosh	AITC
501.	Medinipur	Ghosh, Shri Dilip	BJP
502.	Jhargram (ST)	Hembram, Shri Kunar	BJP
503.	Mathurapur (SC)	Jatua, Shri Choudhury Mohan	AITC
504.	Murshidabad	Khan, Shri Abu Taher	AITC
505.	Purulia	Mahato, Shri	BJP

506.	Balurghat	Jyotirmay Singh Majumdar, Dr. Sukanta	BJP
507.	Bolpur (SC)	Mal, Shri Asit Kumar	AITC
508.	Krishnanagar	Moitra, Ms. Mahua	AITC
509.	Jaynagar (SC)	Mondal, Smt. Pratima	AITC
510.	Bardhaman Purba (SC)	Mondal, Shri Sunil Kumar	AITC
511.	Maldaha Uttar	Murmu, Shri Khagen	BJP
512.	Arambagh (SC)	Poddar, Smt. Aparupa	AITC
513.	Coochbehar (SC)	Pramanik, Shri Nisith	BJP
514.	Jangipur	Rahaman, Shri Khalilur	AITC
515.	Dum Dum	Ray, Prof. Sougata	AITC
516.	Jalpaiguri (SC)	Roy, Dr. Jayanta Kumar	BJP
517.	Kolkata Dakshin	Roy, Smt. Mala	AITC
518.	Birbhum	Roy, (Banerjee), Smt. Satabdi	AITC
519.	Basirhat	Ruhi, Ms. Nusrat Jahan	AITC
520.	Ranaghat (SC)	Sarkar, Shri Jagannath	BJP
521.	Bankura	Sarkar, Dr. Subhas	BJP
522.	Bishnupur (SC)	Saumitra, Shri Khan	BJP
523.	Barrackpur	Singh, Shri Arjun	BJP
524.	Bangaon (SC)	Thakur, Shri Shantanu	BJP
ANDAMAN AND NICOBAR ISLANDS (1)			
525.	Andaman and Nicobar Islands	Sharma, Shri Kuldeep Rai	INC
CHANDIGARH (1)			

526.	Chandigarh	Kher, Smt. Kirron	BJP
DADRA AND NAGAR HAVELI (1)			
527.	Dadra and Nagar Haveli (ST)	Delkar, Shri Mohanbhai Sanjibhai	IND.
DAMAN AND DIU (1)			
528.	Daman and Diu	Patel, Shri Lalubhai Babubhai	BJP
JAMMU AND KASHMIR (6)			
529.	Srinagar	Abdullah, Dr. Farooq	J&K NC
530.	Baramulla	Lone, Shri Mohammad Akbar	J&K NC
531.	Anantnag	Masoodi, Shri Hasnain	J&K NC
532.	Ladakh	Namgyal, Shri Jamyang Tsering	BJP
533.	Jammu	Sharma, Shri Jugal Kishore	BJP
534.	Udhampur	Singh, Dr. Jitendra	BJP
NCT OF DELHI (7)			
535.	South Delhi	Bidhuri, Shri Ramesh	BJP
536.	East Delhi	Gambhir, Shri Gautam	BJP
537.	North West Delhi (SC)	Hans, Shri Hans Raj	BJP
538.	Chandni Chowk	Vardhan, Dr. Harsh	BJP
539.	New Delhi	Lekhi, Smt. Meenakashi	BJP
540.	West Delhi	Singh, Shri Parvesh Sahib	BJP
541.	North East Delhi	Tiwari, Shri Manoj Kumar	BJP

LAKSHADWEEP (1)

542.	Lakshadweep (ST)	Mohammed, Shri Faizal P.P.	NCP

PUDUCHERRY (1)

543.	Puducherry	Ve., Shri Vaithilingam	INC

Abbreviations used for Parties: Aam Aadmi Party-AAP; All India Anna Dravida Munnetra Kazhagam-AIADMK; All India Majlis-e-lttehadul Muslimeen-AIMIM; All India Trinamool Congress - AITC; All India United Democratic Front - AIUDF; All Jharkhand Students Union Party - AJSU Party; Asom Gana Parishad - AGP; Bahujan Samaj Party - BSP; Bharatiya Janata Party - BJP; Biju Janata Dal - BJD; Bodoland People's Front - BPF; Communist Party of India - CPI; Communist Party of India (Marxist) - CPI(M); Dravida Munnetra Kazhagam - DMK; Indian National Congress - INC; Indian Union Muslim League - IUML; Jammu & Kashmir National Conference - J&KNC; Janata Dal (Secular) -JD (S); Janata Dal (United) -JD (U); Jharkhand Mukti Morcha-JMM; Kerala Congress(M) - KC(M); Lok Jan Shakti Party - LJSP; Loktantrik Janata Dal - LJD; Marumalarchi Dravida Munnetra Kazhagam - MDMK; Mizo National Front - MNF; Nagaland Peoples Front -NPF; Nationalist Congress Party - NCP; National Democratic Progressive Party - NDPP; National Peoples Party- NPP; Pattali Makkal Katchi - PMK; Jammu and Kashmir Peoples Democratic Party-J&K PDP; Rashtriya Janata Dal - RJD; Rashtriya Loktantrik Party- RLP; Republican Party of India (A) - RPI (A); Revolutionary Socialist Party - RSP; Samajwadi Party - SP; Shiromani Akali Dal - SAD; Shiv Sena - SS; Sikkim Democratic Front - SDF; Sikkim KrantikariMorcha-SKM; Tamil Maanila Congress (Moopanar)-TMC(M); Telangana Rashtra Samithi -TRS; Telugu Desam Party-TDP; Viduthalai Chiruthaigal Katchi - VCK; Yuvajana Sramika Rythu Congress Party - YSRCP Yuvajana Sramika Rythu Congress Party; Independent - IND., Nominated - NOM.

Footnotes

1. The Land and People

1. Provisional figures.

2. The former state of Jammu and Kashmir was bifurcated to create two UTs:
Jammu and Kashmir, and Ladakh. The Union Territories of Dadra and Nagar Haveli and Daman and Diu were merged as a single union territory from January 26, 2020.

3. Source: The report of the Technical Group on population projections (2011-2036) available at http://main.mohfw.gov.in/sites/default/filesPopulation%20Projection@20Report%202011-2036%20-%20upload_compressed 0.pdf

2. National Symbols

1. As published in Volume Eight of Sri Aurobindo Birth Centenary Library, Popular Edition, 1972.

3. Polity

1. The list of Ministries/ Departments is based on the information as given under Allocation of Business Rules, 1961 as amended from time to time and available on Cabinet Secretariat

32. General Information Appendices

1. Source : mha.gov.in/sites/default/files/tableofprecedence_09032020.pdf

2. Source: President of India website http://presidentofindia.nic.in

3. Source: Vice President of India website http://vicepresidentofindia.nic.in

4. Source: Prime Minister's office website http://pmindia.nic.in

5. Source: Supreme Court of of India website http://www.main.sci.gov.in.

6. Source: Website of Election Commission of India http://eci.gov.in

7. Source: Cabinet Secretariat Website http://cabsec.gov.in

Appendices

1. Source: Cabinet Secretariat website **http://cabsec.gov.in**

India 2021 - A Reference Annual is a comprehensive digest of country's progress in different fields. The book deals with all aspects of development - from rural to urban, industry to infrastructure, science and technology to art and culture, economy, health, defence to education and mass communication.

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